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TRAUMATIC FINANCIAL EXPERIENCES AND PERSISTENT CHANGES
IN FINANCIAL BEHAVIOR:
EVIDENCE FROM THE FREEDMAN'S SAVINGS BANK

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Traumatic Financial Experiences and Persistent Changes in Financial Behavior: Evidence
from the Freedman's Savings Bank
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ABSTRACT

The failure of the Freedman's Savings Bank (FSB), one of the only Black-serving banks in the early post-bellum South, was an economic catastrophe and one of the great episodes of racial exploitation in post-Emancipation history. It was also most Black Americans' first experience of banking. Can events like these permanently alter financial preferences and behavior? To test this, we examine the impact of FSB collapse on life insurance-holding, an accessible alternative savings vehicle over the late 19th and early 20th centuries. We document a sharp and persistent increase in insurance demand in affected counties following the shock, driven disproportionately by Black customers. We also use FSB migrant flows to disentangle place-based and cohort-based effects, thus identifying psychological and cultural scarring as a distinct mechanism underlying the shift in financial behavior induced by the bank's collapse. Horizontal and intergenerational transmission of preferences help explain the shock's persistent effects on financial behavior.

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1 Introduction

History is rife with episodes of institutional exploitation of vulnerable communities, but how consequential can these breaches of trust be—and in what ways? In this paper, we ask whether racially traumatic economic events can durably shift financial behavior.

Specifically, we study the long-run consequences of the failure of the Freedman's Savings Bank (FSB), one of the first and only savings institutions accessible to newly-free Black Americans in the period immediately following the US Civil War. Heavily—and fraudulently—marketed toward this group as a safe place for their often meager savings, the Freedman's Savings Bank collapsed in 1874 as a consequence of speculative investments, corruption, and cronyism on the part of white bank managers (Celerier & Tak, 2021). The collapse had the effect of eliminating roughly 10% of Black wealth at the time (Celerier & Tak, 2021).[1] To face such cataclysmic losses during what was for most Black Americans their very first experience of banking—and under such unscrupulous circumstances—likely rendered the risks of banks unusually salient to this group. Indeed, historical accounts suggest that this combined loss and betrayal sowed a deep and lasting distrust of banks in the Black community (Osthaus, 1976; Fleming, 1927). With banks now viewed with skepticism, Black households sought alternative means of savings and investment. One possible alternative they turned to was life insurance—one of the principal methods of saving among households of all races and socioeconomic strata throughout the late 19th and early 20th centuries (Bullock, 1957; Goldsmith, 1955; Goldsmith & Lipsey, 1963; Temporary National Economic Committee, 1940).

To test the capacity of the Freedman's Savings Bank collapse to shift financial preferences and behaviors, we use a differences-in-differences framework to examine the impact of this shock on a prevalent and accessible alternative to banking at the time: life insurance. Unlike life insurance today, life insurance in the past served as households' main vehicle for savings, offering equity-accumulating savings contracts akin to today's pensions or OASDI. With this in mind, we identify counties in the US South that ever had a Freedman's Savings Bank branch, and compare the size of the life insurance-industry workforce in those counties before and after the bank's failure, relative to that in economically similar counties in the US South that did not have an FSB branch. Our measures of FSB branches are taken from Celerier & Tak (2021) and Fu (2021). Meanwhile, our measures of the insurance workforce are drawn from the full-count decennial US Censuses of 1850-1940.

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[1]Celerier & Tak (2021) calculate that FSB losses accounted for about 10% of the wealth of the targeted Black population, i.e., those living within 50 mi of a branch. Baradaran (2017) estimates losses at about 50%, though this figure likely refers to losses borne by individual FSB depositors.

We focus on life insurance both because it was the principal savings vehicle for US households during the period we study,[2] and because it is the *only* financial product in this period that it is possible to measure locally, on a race-specific basis, and comprehensively over the entire U.S. These features make life insurance an excellent means of measuring changing financial behavior for several reasons. First, life insurance was a popular and readily available financial product over the period of our study, representing a large fraction of total household wealth over this timeframe, and with the vast majority of households—of any race—holding at least some (Bullock, 1957; Goldsmith, 1955; Goldsmith & Lipsey, 1963; Temporary National Economic Committee, 1940). Second, demand measures are readily available both at a spatially fine (i.e., county) level corresponding to FSB exposure, and comprehensively over a long period (i.e., the late 19th and early 20th century). Third, it is one of the few financial choices in this period that can be examined on a race-specific basis in existing data. This is because we are able to exploit the relatively highly integrated (or at least, racially segmented) nature of the insurance workforce, which both employed Black agents and actively sought Black customers. For contrast, and taking bank deposits as an example of an alternative outcome, it is difficult to identify the universe of Black-serving banks in this period (let alone Black dollars within banks serving a mixed clientele). Moreover, analysis of other financial assets, such as bank deposits or real estate, might conflate changes in Black preferences and demand with systemic and policy barriers to accessing these assets in a highly racially segregated setting, given that the barriers to entry for these assets were much higher in this period than for insurance.[3] Of course, beyond these practical advantages that enable a window into changing financial behavior, our focus on life insurance also allows us to contribute to current debates on the causes and consequences of portfolio choice. To give just one example, our choice of insurance demand as an outcome allows us to speak to a large literature documenting strong and disproportionate historical demand for insurance among Black households (Williams & Jones, 1941; Yancy, 1933; Bullock, 1957)—though little has been established about the origins of these patterns. Crucially, this is not just a historical phenomenon: Black households in the present continue to place a significant fraction of savings in life insurance and are less likely to hold equities or bank accounts (Stevenson & Plath, 2002; Hayashi *et al.*, 2018). Moreover, even controlling for income and demographics, Black Americans are likelier to hold life insurance than their white counterparts (Gale *et al.*, 2022; Harris & Yelowitz, 2018). Through our study, we are

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[2]In a companion paper, Arthi *et al.* (2024), we explore more substantively the properties of life insurance in the 19th and early 20th centuries, its role in household portfolios at the time, and its implications for wealth accumulation.

[3]There are to our knowledge no relevant surveys of financial preferences and holdings in this period (such as those used in Fu (2021)), let alone on a race-specific basis.

able to cleanly identify at least one factor contributing to these persistent differences.

Our paper produces several key results. First, we document a sharp, statistically significant increase in the demand for insurance in counties exposed to the shock. This increase is persistent, lasting until our data leave off nearly 70 years after the bank's collapse. It is also economically meaningful, with estimates suggesting that the FSB collapse accounts for an additional annual life insurance policy volume of $600-$3,600 per household (in 2023 dollars) in affected regions. Moreover, it is robust to a range of causal estimation approaches, and is neither an artefact of the 1873 Panic nor of broader trends in local economic development.

Second, we show that the increase in local insurance demand induced by the failure of the Freedman's Savings Bank was a race-specific phenomenon, ruling out the possibility that increases in white demand are driving our central result. Indeed, at minimum 13-20% of the marginal effect of FSB collapse on local insurance demand that we document is attributable exclusively to changes in Black insurance holdings, raising the overall share of exclusively Black-serving insurance agents by roughly 4 percentage points in these communities. These results are consistent both with the racial targeting of the Freedman's Savings Bank, and with Black customers' relative inexperience with bank failures (and so, their potentially outsized updating on banking risks) compared to their white neighbors. Together, these results lend credence to our interpretation of the Freedman's Savings Bank collapse as a fundamentally racialized trauma with racialized consequences.

Third, we provide evidence identifying psychological and cultural scarring as a distinct mechanism underlying the shift in financial behavior induced by the bank's collapse. For instance, we show that the presence of Black bank tellers and Black-owned banks attenuates our main effect on local life insurance demand, suggesting that in-group trust may have helped to mitigate any broader distaste for banks among the Black community caused by the FSB failure. Likewise, using migrants from FSB counties to distinguish potential ongoing place-based effects from those embodied in people's beliefs, preferences, and experiences, we show that non-FSB regions that received large flows of FSB migrants also saw increases in the demand for insurance. These migrants not only brought their own demand for alternative savings vehicles with them to their new homes, shaped by their adverse experiences with the Freedman's Savings Bank. Instead, they also appear to have transmitted their preferences to others once there: both horizontally, to their non-FSB-exposed friends and neighbors, and vertically, to their non-FSB-exposed descendants and family members. These effects help to explain the wide scope and intergenerational persistence of our results.

Together, our results suggest that racially traumatic economic events can durably alter financial behavior—perhaps especially when these events operate on vulnerable or financially

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less experienced groups. To the extent that these historical episodes have shaped persistent racial differences in portfolio composition, they could also have potential implications for racial disparities in long-run wealth accumulation (Derenoncourt *et al.*, 2022). Importantly, we show that episodes of historical racial exploitation can have long-reaching impacts beyond just the health realm, in which effects like these are relatively better documented (see, e.g., Alsan & Wanamaker (2018); Archibong & Annan (2021); Lowes & Montero (2021)). Likewise, and in contrast to macroeconomic studies that document discrete cohort effects of macro crises on financial preferences (Malmendier & Nagel, 2011; Graham & Narasimhan, 2004), we show that large economic shocks can also have effects on preferences that extend beyond the affected cohorts' lifetimes, perhaps because of the racialized nature of this particular economic shock and the corresponding cultural transmission. Finally, where the bulk of the Freedman's Savings Bank literature to date has focused on its operations and short-run effects (Fu, 2021; Celerier & Tak, 2021; Traweek & Wardlaw, 2021; Stein & Yannelis, 2020), we contribute by examining its failure, and in particular, documenting its long-run economic fallout. Moreover, we disentangle potential effects on the economic structure of FSB localities from those due to the changing beliefs of their residents, and document persistence through intergenerational transmission of both lived experience and cultural memory.[4]

2 Related literature

Our study is motivated by a literature in health that documents that major breaches of institutional trust can have persistent effects on patient preferences and behaviors, with material consequences for wellbeing. These betrayals can run the gamut from mere negligence, as in the case of vaccine trials gone wrong (see, e.g., Fairley *et al.* (2024); Archibong & Annan (2021))[5] to willful exploitation, as in the case of the infamous "Tuskegee Study" (Alsan & Wanamaker, 2018), in which Black men were denied informed consent and were instead deliberately exposed to syphilis as part of a medical experiment.

Relevant to our setting, this sort of long-run effect on attitudes, often termed "scarring," appears especially prevalent in circumstances where there are elements of abuse of power, or of real or perceived targeting based on a socially vulnerable racial, ethnic, or religious identity.

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[4]See, e.g., Dohmen *et al.* (2012), who, using modern German survey data, likewise document the role of the local environment and of parent-child interactions in the transmission of risk and trust attitudes.

[5]In public health, exposure to negative information about vaccines has been shown to contribute to vaccine hesitancy (Fairley *et al.*, 2024; Orsini *et al.*, 2022; Martinez-Bravo & Stegmann, 2022; Archibong & Annan, 2021; Deiana *et al.*, 2022). The "Cutter Incident," in which a mismade batch of polio vaccines infected tens of thousands of Americans with the live virus, is a prime example of this phenomenon. There, a locality's historical exposure to this mid-20th-century episode was shown to raise decades-later mortality—and even present-day morbidity—from vaccine-preventable diseases (Fairley *et al.*, 2024).

For instance, Archibong & Annan (2021) find that following a deadly Pfizer vaccination test undertaken in Muslim communities in Nigeria, there was a sustained rise in vaccine hesitancy among mothers residing in minority Muslim neighborhoods. Likewise, Lowes & Montero (2021) demonstrate that deleterious medical interventions by the French colonial government in early 20th century Central Africa contributed to contemporaneous medical distrust,[6] which persists today and manifests in a reduction in health-seeking behaviors.

Perhaps the most notorious example in this vein is the "Tuskegee Study" mentioned above, in which Black men in the US South were purposefully exposed to syphilis without their knowledge in order to study the disease's effects. Alsan & Wanamaker (2018) show that public disclosure of this study precipitated a deep and persistent distrust of medical institutions among Black men, resulting in fewer physician interactions and worse longevity for this group.[7] Interestingly, Alsan & Wanamaker (2018) use a Bayesian belief formation model to explain why men, because they have less baseline experience than (childbearing) women with the medical system, reacted more strongly to adverse information on physician trustworthiness. A similar phenomenon may also at play in our setting, where the relative inexperience of Black households with the banking system as of the FSB's 1874 collapse led them to update more forcefully based on this initial bad experience. Indeed, Bayesian updating might also help explain why life insurance came to be an attractive alternative to banking for this group: on top of being readily available to Black households, and unlike with banks, Black households had a long preexisting familiarity with insurance products—in particular, burial insurance purchased through churches and community organizations. The findings in Alsan & Wanamaker (2018) underscore that changes in beliefs and behavior regarding institutions may be as much a function of active exploitation by these institutions as it is of the increased salience of institutional failures (even "benign" or quotidian ones) to populations with little prior experience of them. In both explanations, however, the underlying cause for change in beliefs is tied to one's status as a marginalized group.

Together, these studies in health underscore that a discrete traumatic event can influence tangible outcomes for decades and even centuries, since changes in behaviors and preferences induced by the event need not be limited to the victims themselves, but may also spill over to contemporaneous observers and to subsequent generations. To wit, research in economics and psychology suggests that the identity-based or racialized nature of these shocks may help explain their salience beyond those directly affected, and therefore, the durability and

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[6] A distinct but related literature focuses on the origins of distrust more generally. Many of these emphasize persistence and the role of intergenerational transmission (Nunn & Wantchekon, 2011; Nikolova *et al.*, 2022).

[7] Related to themes of race and institutional distrust, exposure to police violence can diminish Black mens' mental health (Bor *et al.*, 2018) and hinder the educational progress of minorities in school (Ang, 2021).

wide scope of their downstream effects (Alsan & Wanamaker, 2018; Tabellini, 2008; Gutsell & Inzlicht, 2010; Singer *et al.*, 2006).

There is reason to believe that an episode of institutional racial exploitation as economically consequential as the failure of the Freedman's Savings Bank might similarly affect attitudes and behavior—albeit in the financial domain relevant to the shock.[8]. Indeed, a literature in macroeconomics and finance suggests that traumatic economic events can shape financial preferences and decision-making. For instance, exposure to severe macroeconomic shocks such as the Great Depression have been shown to increase risk aversion among those that came of economic age during the crisis (Malmendier & Nagel, 2011; Graham & Narasimhan, 2004; Malmendier & Shen, 2018). Financially scarring events can also erode public trust in institutions. To wit, recent research suggests that in Germany, the 1931 banking crisis ultimately led to the scapegoating of Jews and rise of the Nazi party (Funke *et al.*, 2019). Likewise, personal experiences of fraud, exploitation, and discrimination have been shown to sow mistrust in financial institutions, resulting in low utilization of financial services (Gurun *et al.*, 2018; Dupas *et al.*, 2014; Rhine *et al.*, 2006).

While the effects in these studies tend to be shorter-lived than those documented in the health literature—often confined to the lifetime of a single affected cohort—we hypothesize that the features that make the Freedman's Savings Bank collapse distinct as a shock likely also render its effects distinct in their scope and longevity, relative to others in the macrofinancial literature on scarring. Specifically, given the institutional and racial power dynamics involved, and the limited prior opportunities for Black households to bank, the FSB shock may have been more salient to even those nominally unexposed to the FSB, with attitudes about it also more readily transmitted through pre-existing community ties.[9] Interestingly, there is precedent for thinking about intergenerational transmission of financial preferences outside of the context of scarring events: for instance, Chiteji & Stafford (1999) suggest a role for social learning within families in the intergenerational persistence of portfolio choice among Black households. To the extent that the FSB failure changed the financial preferences and behaviors of directly-impacted cohorts, it would stand to reason that these changes may endure in part through these existing social dynamics. To better understand our shock in context, we discuss the history of the Freedman's Savings Bank next.

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[8]We are agnostic as to the particular attitudes driving the shift in behavior, in part because this is difficult to disentangle in the existing data. However, identifying the specific beliefs affected by shocks such as these is a worthwhile avenue for future research, given that each—e.g., a loss of trust in banks versus a change in risk preferences more broadly—has distinct policy implications and merits a distinct policy response.

[9]Research finds that negative shocks resonate most with individuals who share socioeconomic characteristics with the victims, and therefore identify closely with them. Williams (2022) suggests that shock-induced changes in cultural norms are then transmitted intergenerationally, contributing to persistence.

3 Empirical setting

3.1 The Freedman's Savings Bank

Established in 1865 during the Reconstruction Era, the primary stated goal of the Freedman's Savings Bank (FSB) was to teach financial literacy and thrift to the nearly 4 million recently-freed Black people fighting an uphill battle to economic stability (Osthaus, 1976). Despite its philanthropic origins, the bank's management, composed exclusively of white Northern businessmen, engaged in increasingly speculative investing practices, cronyism, and corruption that ultimately caused the bank's collapse. Historians argue that the failure of the FSB contributed to a lasting distrust in savings institutions by Black Americans (Osthaus, 1976; Baradaran, 2017; Fleming, 1927).

The formation of the FSB stemmed from the military savings banks set up for Black troops during the Civil War (Osthaus, 1976; Baradaran, 2017; Fleming, 1927). After hearing the success of these institutions, a group of Northern philanthropists petitioned Congress for a charter to establish the FSB, strategically prioritizing cities with either large Black populations or large numbers of recently-paid Black troops (Osthaus, 1976). The FSB would soon expand to 37 branches across 17 states and D.C., with the vast majority of branches in the South (Fleming, 1927). Although its name suggests a direct connection with the Freedman's Bureau, a government entity focused on supporting the immediate needs of the Freedmen, the FSB was managed by a board of trustees consisting of white Wall Street businessmen, and had no connection with the federal government beyond its Congressional charter. Despite this, the bank extensively advertised in Black-owned newspapers the false impression that deposits were insured by the US government (Celerier & Tak, 2021; Baradaran, 2017; Osthaus, 1976). The advertising successfully attracted new depositors, the vast majority of whom were low-wage workers (Celerier & Tak, 2021; Traweek & Wardlaw, 2021).

The bank's board of trustees faulted the bank's initial Congressional charter for financially handicapping the bank. A successful Black-serving bank authorizing loans for entrepreneurship and homeownership would put depositor funds to productive use and drive economic growth (Clarke, 2019; Baradaran, 2017), but the FSB's establishment as an exclusively savings institution prohibited it from making loans (Osthaus, 1976; Baradaran, 2017).The trustees successfully lobbied Congress to amend the bank's charter in 1870, authorizing management to invest depositor funds in speculative securities (Osthaus, 1976; Baradaran, 2017). This amendment transitioned the FSB from a safe place to hold savings to a speculative investment institution, undermining the bank's core mission.

According to Celerier & Tak (2021), who compile an exhaustive dataset of both the Bank's loans and advertisements, despite the fact that roughly 90% of FSB depositors were Black, 80% of loans went to white borrowers, and the vast majority of loans were fraudulent and never repaid. Further, bank management deliberately exploited depositors by intensifying advertisement efforts in response to the Bank's new charter in an attempt to enlarge the pool of deposits to plunder. Consequently, instead of facilitating loans that benefited depositors, the bank's management effectively transferred the savings of the Freedmen to white elites.

Henry Cooke, chair of the bank's financial committee and brother of banker Jay Cooke, managed the bank's finances, making loans to several companies the Cooke family had a personal stake in (Osthaus, 1976; Baradaran, 2017). When Jay Cooke's bank failed, triggering the Financial Panic of 1873, the FSB was obligated to liquidate its sound securities to satisfy depositor demand (Osthaus, 1976). The bank may have survived if not for its speculative loans, many of which were illiquid and made at low interest (Osthaus, 1976). While the bank outlasted the run, it ultimately could not cover its expenses and closed in July 1874 (Osthaus, 1976). The bank's trustees elected a commission responsible for liquidating the bank's remaining assets and refunding depositors, ultimately declaring five dividends over the course of nine years amounting to 62% of total deposits owed, although only 19.8% of deposits were recouped on average (Celerier & Tak, 2021; Osthaus, 1976). Congress debated reimbursing depositors fully, but the legislation lacked sufficient political support for enactment. For more on the history and operations of the bank, see Appendix A.1.

The consequences of the FSB's failure were severe, wiping out about 10% of the wealth of its target population of Black households (Celerier & Tak, 2021). For the Freedman, this loss was consequential—but even compared to other national bank failures, the FSB collapse remains among the most severe in history (Celerier & Tak, 2021). Further, the Freedmen's relative inexperience with financial institutions likely exacerbated the psychologically scarring effects of this failure. Traweek & Wardlaw (2021) analyze the passbook activity of FSB depositors and find that white depositors, who comprise 10% of total depositors, were more than twice as likely to withdraw deposits following the onset of the 1873 Financial Panic than were Black depositors. Consequently, Black depositors were exploited both through false advertisements to fuel the plunder by white elites, and through their inexperience in the banking sector. The result was a wealth transfer from Black to white Americans.

Following the bank's failure, the belief that the bank was a mechanism through which whites could swindle Blacks of their economic prospects circulated throughout Black communities (Osthaus, 1976). Contemporaneous quotes provided in Appendix A.2 vividly illustrate the view among Black households that they had been specifically targeted for exploitation.

The decimation of Black savings contributed to deep distrust of the banking institution, likely stifling Black economic development (Baradaran, 2017; Kinzer & Sagarin, 1984). According to W.E.B. Du Bois, "Not even ten additional years of slavery could have done so much to throttle the thrift of the freedmen..." than the failure of the Freedman's Savings Bank (Du Bois & Marable, 2015, p. 36). In 1913, almost 40 years after Freedman's collapse, bank president Richard Henry Boyd remarked that community elders, still scarred by the Freedman's Savings Bank collapse, had continued to instill distrust of banks in their children (Osthaus, 1976, p. 224). Consequently, Black-owned and Black-serving banks struggled to attract Black depositors for decades after the FSB collapse, with Black Americans often opting to store excess cash at home or with the Postal Savings System (Osthaus, 1976; Thieblot Jr & Fletcher, 2016; Kinzer & Sagarin, 1984).

Little is known about the effects of the rise and fall of the FSB on Black economic development beyond the qualitative assessments of historians.[10] Interest in this topic has recently emerged, however, with scholarship examining the determinants of Black inclusion in banking, the effects of the FSB on its depositors' human capital, and the long-term consequences of the bank's failure (Stein & Yannelis, 2020; Celerier & Tak, 2021; Traweek & Wardlaw, 2021; Fu, 2021). Notably, Fu (2021) finds that the FSB failure contributed to present-day distrust of banks, as 21st century Black households residing in counties with historically high exposure to the bank's failure are less likely to engage with the banking system. Evidence on the short-term effects of the bank is mixed, with some studies finding that the bank prior to its failure provided significant educational and economic benefits to its depositors (Stein & Yannelis, 2020; Fu, 2021), although this finding is a matter of debate in the literature (Celerier & Tak, 2021). Our study is the first to assess how the psychological and cultural scarring effects resulting from the failure of the FSB—above, beyond, and distinct from any effects of the bank's collapse on the economic structure of FSB localities—affected Black financial behavior throughout the 19th and 20th centuries.

3.2 Life Insurance

Facing highly segregated economic markets, Black Americans had relatively few options for savings and investment. One that was relatively more accessible to Black customers in this period, and which we focus on in this study, is life insurance.

Life insurance was popular throughout the late 19th and early 20th centuries across racial and socioeconomic lines, and represented a major source of household savings (Bryson, 1959;

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[10]A related literature on the economic history of Black-owned and Black-serving banks more broadly, however, is also emerging in economics; see, e.g., Clarke (2019).

Temporary National Economic Committee, 1940; Goldsmith, 1955; Goldsmith & Lipsey, 1963; Bullock, 1957). These policies offered a range of attributes, including the opportunity to borrow against their value, but most crucially, they were used as a form of old-age savings in an era before Social Security (Goldsmith, 1955; Goldsmith & Lipsey, 1963; Arthi *et al.*, 2024). This was particularly true of ordinary life policies (similar to today's whole life policies), which tended to be taken out by household heads and prime-age men, were typically larger in value, and paid either an annuity or lump sum after the policyholder reached a specified age, or paid benefits to survivors in the event of the policyholder's death. Industrial life insurance policies, for contrast, tended to be taken out on behalf of women and young children, were smaller in value and had shorter maturities. A final major category of life insurance was group life, typically used by employers, and in which a single policy covered a large group. While industrial life insurance initially comprised the majority of Black life insurance holdings (Stuart, 1969; Pierce, 2013), one mid-century study suggested that Black households' insurance holdings by value in force were: ordinary life 60%, industrial life 32%, and group life 8% (Bryson, 1959).

Although traditions of insurance in the Black community can be traced to Black churches, benevolent groups, and mutual aid societies organized to provide support to members in times of crisis (Abner III, 1962; Stuart, 1969; Woodson, 1929; Southern, 1942), most Black households purchased life insurance policies from formal insurance firms post-Emancipation, whether white- or Black-owned. Insurance agents selling industrial life policies traveled door-to-door to hand-collect weekly premiums from customers, while premiums on ordinary life insurance were collected less frequently, albeit in a similar manner (Abner III, 1962; Southern, 1942). This feature of life insurance sales motivates our choice of measure for local insurance demand, discussed in more detail in Section 5. Likewise important for our analysis are the racial dynamics of the industry. White-owned firms both employed Black agents and sold policies to Black customers—whether via Black or white agents. Indeed, most Black households purchased life insurance from white-owned companies, and were likely served by white agents. Importantly, however, while white insurance agents sold policies to both Black and white households, Black insurance agents (whether employed by a white-owned or Black-owned firm) sold only to Black customers (Stuart, 1969; Pierce, 2013; Southern, 1942; Kinzer & Sagarin, 1984; Bryson, 1959). Consequently, the number of Black insurance agents in a region represents a reasonable proxy for the lower bound of Black household demand for life insurance.

4 Estimation strategy

4.1 Difference-in-Differences Using Two-Way Fixed Effects

Throughout our main analysis, we adopt a difference-in-differences (DiD) identification strategy, exploiting the plausibly exogenous failure of the Freedman's Savings Bank to estimate its effect on demand for insurance by households residing in counties containing a FSB branch, relative to that in unexposed counties. Our baseline specification takes the following form:

$$AgentsPerHH_{ct} = \alpha + \beta FSB_c * POST_t + \gamma_c + \lambda_t + \epsilon \tag{1}$$

where $AgentsPerHH$ is the number of insurance agents per 1,000 households for county (or city) c in year t. The average treatment effect on the treated (ATT) is estimated by interacting $POST$, an indicator equal to 1 in years after the bank's 1874 failure,[11] with FSB, an indicator equal to 1 if the county ever housed a Freedman's Savings Bank branch.[12] A positive β indicates that difference in demand for insurance between treatment and control counties increased after the Freedman's Savings Bank failed. Our baseline specification takes a two-way fixed effects (TWFE) form, controlling for time-invariant characteristics of the county a particular branch was located in, captured by γ_c, and spatially-invariant characteristics of a given year, captured by λ_t. The ATT is identified if the treatment, $FSB_{ct} * POST_t$ is orthogonal to the error term, ϵ, and the parallel trend assumption holds. We cluster our standard errors by county, the level of our treatment (Abadie *et al.*, 2017).

4.2 Threats to Identification

We address several threats to identification in this analysis. First, although our period, 1850-1940, provides 3 Census years to test pre-treatment trends, the 1850-1860 Censuses notably do not enumerate slaves. The Emancipation Proclamation was signed in 1863, freeing slaves and fundamentally changing the Southern economy. Accordingly, 1870 is the first and only pre-treatment period for which information on all Southern residents is available, complicating the analysis of parallel trends. We adopt several strategies throughout the paper to address this concern, the main ones of which we detail below, and others of which appear in line with our discussion of results.

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[11]Our sample period runs from 1850-1940, inclusive, which is the period over which we have access to full-count Census data.

[12]Our main analytical sample consists of what was traditionally the South, excluding Texas.

Our primary identification concern is the endogenous selection of FSB branch locations. The historical record provides ample information regarding the determinants of branch locations (Osthaus, 1976). In the early years of the bank's formation, 1865-1868, branches were established in cities occupied by Black troops to persuade them to deposit their pay. Black troops occupied 163 counties throughout the Reconstruction Era. The timing of pay disbursement and ease of access for bank officials to reach Black troops plausibly exogenously determined the location of the Bank's early branches.

The Bank's later branches, 1869-1871, were endogenously located in cities where a branch was deemed economically viable. Strategic placement of branches in growing cities would positively bias our results, as unmeasured regional economic growth potential is likely correlated with the selection of branch locations. We analyze the failure of early and late branches both together and separately, relying on the plausible exogeneity of the early branch locations, and recognizing the potential upward bias among later branch locations. In our two-way fixed effects specifications, we condition on race-specific pre-treatment trends in covariates likely correlated with branch location and insurance uptake. We further employ a battery of alternative specifications and estimation techniques to minimize potential bias and probe the robustness of our results.

Finally, we posit that utilizing a combination of econometrically distinct and complementary approaches can help to address concerns regarding causal identification. Accordingly, in addition to the two-way fixed effects approach outlined above, we adopt two further estimation strategies to help overcome threats arising from selection into treatment and potential parallel trends violations. First, we supplement our two-way fixed effects results using a set of several doubly-robust estimators—ranging from inverse-probability weights to synthetic differences-in-differences—that use propensity score methods to aid identification in Equation 1. Propensity score methods rely on the assumption that selection into treatment is random conditional on a set of predictive covariates. For the purposes of our doubly robust analysis, we estimate the probability of treatment assignment using 1870 county averages by race of literacy and employment rates, as well as wealth, urban status, socio-economic status (proxied by occscore), and family size. For more details on each doubly-robust approach we use and its associated specification, see Appendix B.1. Second, we adopt an instrumental variable approach to address the endogeneous selection of counties into treatment. This approach, motivated by historical evidence on FSB management's branch selection process, takes as its primary instrument for FSB locations the extent of Black military presence in a county during Reconstruction. We also explore alternate instruments for FSB branch locations, including the presence of Civil War-era contraband camps (refugee camps for escaped slaves) and the extent of total US military presence during Reconstruction (a proxy for safe

passage of FSB personnel and customers). For more on each instrument and its justifying rationale, see Appendix B.2.

5 Data

Our primary outcome of interest is the number of individuals employed as insurance agents per 1,000 households in each county-census year over the period 1850-1940. We compute these measures from full-count decennial US Census data Ruggles *et al.* (2019), using consistent 2016 county borders.[13] Although microdata on household insurance holdings are unavailable for the period of this study, we propose that agents per 1,000 households is a sufficient proxy. This measure of insurance holdings is supported by the characteristics of the insurance market throughout the 19th and 20th centuries, as discussed in Section 3.2 and Appendix A.4.[14] In particular, agents selling industrial life insurance, one of the primary insurance policy types purchased by Black households, collected weekly premiums door-to-door, and therefore had a natural limit of households they could market. Agents selling ordinary life often collected premiums by mail, but were still bound by an upper limit of households. Data from Stalson (1942) shows that an additional insurance agent is associated with new insurance sales of approximately $600 per household on average, in 2023 dollars. Figure 2, which provides an 1870 snapshot of the spatial distribution of insurance agents, indicates substantial within- and across-state variation in baseline insurance activity.

Notably, we are unable to distinguish insurance sales by race of household. While white insurance agents sold to both white and Black households, Black insurance agents only marketed to Black households. Accordingly, we compute two measures of Black-specific insurance demand. The first is the number of Black insurance agents per 1,000 Black households, and is a correlate of Black insurance holdings. The second is the share of all insurance agents who are Black, and indicates exclusively-Black insurance holdings relative to mixed-clientele holdings. These measures must be interpreted cautiously, however, as a study of Black insurance holdings in 1954 Baltimore indicated that 84% of insurance in force was purchased from white-owned insurance companies (Bryson, 1959). Further, we have no indication of how this statistic varies across space and time. Accordingly, we focus our main analysis on

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[13]To create geographically consistent measures, we merge Census data with crosswalks developed by Berkes *et al.* (2022), which geolocate most individuals in our data to a latitude and longitude and assign a corresponding 2016 county and state. We assign the remaining individuals to a modern county using historical county crosswalk data from Eckert *et al.* (2020). This period allows us to control for pretreatment characteristics (1850-1870) and to analyze post-treatment outcomes (1880-1940). The unit of analysis is county for the majority of observations, and city for the minority of cities that are independent from counties. We restrict to counties in existence as of our first (i.e., 1850) observation.

[14]In Section 7.6, we outline evidence that the size of the insurance workforce reflects consumer demand.

total insurance agents, and conduct robustness checks using the race-specific measures.

We use the 1860 and 1870 US Censuses to generate pre-treatment county-level variables we expect to correlate with both FSB locations and insurance demand. Specifically, we calculate county-level averages of employment rates, literacy rates, occupational scores, wealth, urban status, and family size, by race of household head. While 1860 measures capture pre-treatment-assignment county characteristics, the full Black population was not enumerated until the 1870 Census. We therefore rely on race-specific county characteristics from 1870, which could in theory be contaminated by assignment to treatment group from 1865-1870, but precedes the 1874 failure of the Freedman's Savings Bank.

We take FSB locations, number of depositors, and year opened from Fu (2021) and Celerier & Tak (2021). The explanatory variable of interest is FSB, a binary variable equal to unity if the county or city ever received a FSB branch, interacted with $POST$, a binary variable equal to unity in years after the Bank's 1874 failure. FSB branches were spread throughout the United States, ranging from Houston to New York City, although the vast majority of branches were located in the South. We drop New York City and Philadelphia from this analysis to restrict our analysis to the Southern economy. We further drop Houston from the analysis as this branch closed prior to the bank's failure. We therefore restrict our main analysis to all counties within a Southern state that ever received a FSB branch. Branch locations are depicted in Figure 3.

We draw on a range of other data to facilitate our IV and doubly-robust identification strategies, as well as to explore mechanisms and robustness. We discuss these sources and methods in line with those analyses in later sections of the paper.

6 Main Results

6.1 Two-Way Fixed Effects

Table 1 uses a two-way fixed effects approach to estimate the effect of the Freedman's Savings Bank failure on local insurance demand, here given by the number of insurance agents per 1,000 households. All specifications are restricted to the South, include county and year fixed effects, and cluster standard errors by county.

Column 1 presents the simplest two-way fixed effects specification, which suggests that following the failure of the Freedman's Savings Bank in 1874, counties with an FSB branch saw a statistically significant increase of nearly 4 agents per 1,000 households.[15] For context,

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[15]We interpret our results throughout this paper as reflecting a change in insurance demand rather than

based on insurance industry statistics compiled in the 1930s, one additional agent could be expected to generate new insurance sales of approximately \$600 per household in 2023 dollars (Stalson, 1942). Columns 2 and 3, which add state-by-year fixed effects and state trends, respectively, show similar significance and magnitudes.

Given potential concerns about the endogenous placement of FSB branches—namely, that they may have been established in economically vibrant locations that were predisposed to insurance products even prior to FSB collapse—in Columns 4-6 we add to our standard specification trends in 1860 Black and white covariates, 1870 Black and white covariates, and 1870 Black covariates, respectively. These covariates include the percent Black, share urban, literacy rate, average occscore, employment rate, wealth, and family size. Because the characteristics of the local Black population—the group of primary relevance to our analysis—are poorly measured prior to the end of the Civil War,[16] we place greater emphasis on the results in Columns 5 and 6. Indeed, we view the approach in Column 6 as being that which best addresses the particular endogeneity concerns of this setting, given that the motivation for FSB branch placement was to identify localities with large and relatively affluent *Black* populations specifically rather than large and relatively affluent populations more generally. Because of this, we use this specification going forward in the paper when comparing results across two-way fixed effects and alternative estimation strategies. Here, we see that the addition of local economic and demographic trends in Columns 4-6 lowers the estimated treatment effect of FSB failure to roughly 1.1-1.6 agents per 1,000 households, an effect which remains strongly statistically significant.

Finally, based on the idea that the endogeneity of FSB branch placement may have been stronger amongst branches built later in the bank's history, as the bank responded to lessons learned from its earlier branches and fine-tuned its expansion strategy, we separately estimate the effects for branches built up to and including 1868 ("early branches," Column 7), and branches built 1869 and after ("late branches," Column 8). Consistent with this hypothesis, effect sizes are slightly larger for late branches than for early ones.

In the Appendix, we present several further checks on our results. First, we account for the possibility that because FSB locations tended to be more urban by design, our results may merely reflect the long-term trajectories of urban, economically ascendant localities more

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a change in insurance supply. There is little reason to believe that supply would have changed differentially in FSB vs non-FSB counties following the bank's collapse, particularly given that none of the fundamentals determining eligibility, price, coverage, or the costs of offering plans; nor marketing efforts by the industry; changed over time and space in ways that were correlated with the shock. For more, see Section 7.6.

[16]1860, a Census year prior to Emancipation, is the last year in the Census prior to the establishment of FSB branches, the bulk of which opened in the mid-to-late 1860s. 1870 presents us the closest reasonable snapshot of Black population, education, wealth, and income in a year prior to FSB collapse.

Table 1: Two-Way Fixed Effects

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
				DV: Insurance Agents Per 1,000 Households				
FSB × Post	3.952***	4.011***	3.921***	1.215***	1.128***	1.598***	3.548***	4.921***
	(0.356)	(0.353)	(0.357)	(0.411)	(0.402)	(0.375)	(0.385)	(0.682)
Observations	8,352	8,352	8,352	8,352	8,352	8,352	8,262	8,136
R-squared	0.713	0.737	0.725	0.763	0.771	0.754	0.701	0.695
Fixed Effects	County, Year	County, Year, State × Year	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	No	State	1860 Covariates	1870 Covariates	1870 Black Covariates	No	No
Cluster	County	County	County	County	County	County	County	County
Sample	South	South	South	South	South	South	Early South	Late South

Notes: Each column is a separate regression of *AgentsPerHH* on *FSB*, an indicator for Freedman's Savings Bank exposure, interacted with *Post*, an indicator for years subsequent to the Bank's 1874 failure, along with the noted fixed effects and time trends. Column 4 (5) includes time trends of 1860 (1870) white and Black county averages of employment, literacy, wealth, urban status, socio-economic status, and family size. Column 6 includes time trends of the same controls, but only 1870 Black county averages. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Treated counties in Column 7 are restricted to branches that opened prior to 1869. Treated counties in Column 8 are restricted to branches that opened after 1868. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

generally. To this end, in Table 15, we present results estimated exclusively on a sample of urban counties—i.e., a sample in which the control group more closely resembles the treated counties economically and demographically. Though these adjustments slightly lower effect sizes, they remain extremely similar to our main results in sign (positive), size (ranging from 0.799-2.401 agents per 1,000 households), and statistical significance (all statistically significant, with all but one estimate significant at the 1% level).

Second, we account for the possibility that our results reflect not the FSB failure itself, but rather pent-up demand for insurance among the newly-emancipated Black population, most of whom were unable to participate in these markets prior to the end of the Civil War. Put another way, we ask: had the entire Black population in our sample been free to purchase insurance prior to our first post-Emancipation observation in 1870, would our FSB-failure results disappear? Table 17 suggests that this is not the case: both specifications that track the demand for insurance in the South pre- versus post-Civil War as a function of the percent enslaved, and specifications that estimate pre-Emancipation correlations between insurance demand and a Southern county's share of Black population that was free, produce small, negative, and statistically insignificant results. Moreover, in a more econometrically like-with-like comparison to our main results, we show that when estimating our main specification on the sample of states, New York and Pennsylvania, which both had FSB branches and were also free states prior to 1870,[17] effects range from a statistically significant 0.765-2.272—roughly 50-60% of the estimated effect sizes in our main (Southern) sample. That is, assuming that baseline Black demand for insurance is similar in New York and Pennsylvania to that in the South, and assuming that FSB treatment effects are similar across these locations, we can conclude that even while a fraction of our main results may

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[17]Note that New York City and Philadelphia branches are excluded from our main analysis.

be due to pent-up demand for insurance in the South (represented by the smaller treatment effects estimated in the NY-PA sample compared to our main sample), there exists a large and significant causal effect of FSB failure on insurance demand above and beyond this (represented by the positive and significant effects estimated for NY and PA).

6.2   Doubly-Robust Methods

Our second approach to identification involves a range of doubly-robust estimation methods, which we present in Table 2. As outlined in Section 4.2 and Appendix B.1, the aim of these methods is to overcome threats to inference arising from the possibility of selection into FSB status and potential parallel trends violations corresponding to such endogenous treatment.

In Column 1, we present inverse probability weighted results, where these weights are based on 1870 county-level Black and white averages for urban share, literacy rates, employment rates, occupational income, wealth, and family size. These variables are also used to balance treatment status in Columns 2 and 3, which present DRIPW and DRIMP estimation results, respectively.[18] Column 4, our preferred doubly-robust specification, presents results of the same estimation strategy used in Column 3, but restricts the balancing covariates to Black county-level averages in 1870. Columns 1-4 paint a consistent picture: even after adjusting for potential bias arising from endogenous FSB branch placement, there remains a substantial, positive, and statistically significant effect of FSB failure on local insurance demand. Crucially, the event studies in Figure 4 show that the DRIMP specifications (with 1870 covariates in Panel A, and with 1870 Black covariates in Panel B) overcome concerns over differential pre-trends.

It is worth noting that accounting for potential endogeneity in this manner attenuates the results compared to those produced in the naive two-way fixed effects specifications, such as in Column 1 of Table 1; rather than increasing the agents per 1,000 households by roughly 4, here, FSB failure increases this figure by roughly 1-2. Notably, the results of our preferred two-way fixed effects specification, which incorporates 1870 Black covariate trends (see Column 6 in Table 1), are nearly identical to the doubly-robust estimates in Columns 1-4 of Table 2 in terms of sign, significance, and magnitude. This is perhaps unsurprising, given that controlling for trends in the variables likely to determine treatment status is an approach very similar in spirit to those formalized in IPW and DRIMP methods. This concordance gives us additional confidence in relying on the two-way fixed effect specification with 1870 Black covariate trends in those rare situations where doubly-robust methods cannot be implemented in our data.

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[18]See Appendix B.1 for precise definitions of DRIPW and DRIMP methods.

Table 2: Doubly-Robust Methods

	DV: Insurance Agents Per 1,000 Households				
	Doubly Robust				Synthetic Control
	(1)	(2)	(3)	(4)	(5)
FSB × Post	1.259***	1.370***	1.082**	1.796***	2.604***
	(0.475)	(0.445)	(0.474)	(0.370)	(0.363)
Observations	8,352	8,352	8,352	8,352	8,352
Method	IPW	CS DRIPW	CS DRIMP (70)	CS DRIMP (70B)	SDID
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Cluster	County	County	County	County	County

Notes: Each column presents an average treatment on the treated (ATT) estimate of the effect of exposure on *AgentsPerHH*. Columns 1-3 are estimated using pre-treatment assignment time-invariant covariates, including 1870 white and Black county averages of employment, literacy, wealth, urban status, socio-economic status, and family size. Column 5 replicates Column 4, but uses only Black-specific 1870 covariates. Column 5 is estimated using synthetic difference-in-differences. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

Finally, in Column 5, we present the results of synthetic difference-in-difference estimation. Although these rely on a slightly different econometric approach than the doubly-robust methods showcased in Columns 1-4 in that they construct a counterfactual control group using weights calculated from both pre-treatment values of $AgentsPerHH$ and time effects of untreated counties, they, too, produce similar results—namely, a statistically significant increase of 2.604 agents per 1,000 households. Figure 5 illustrates these synthetic difference-in-difference results graphically, where we can see the treated and control groups following each other tightly in the pre-collapse period, and diverging sharply thereafter—particularly after 1880, when we hypothesize that many Black Americans may have first had sufficient funds following Emancipation to invest in insurance products.

6.3   Instrumental Variables

Yet another approach to establishing causal effects is to implement an instrumental variables strategy. Here, motivated by historical evidence that FSB branches were seen initially as an institution to absorb the wages of and foster thrift among Black troops during Reconstruction (including Freedmen who were recruited during the Civil War with the promise of future pay), we use as our main instrument the maximum number of Black troops stationed in a county over the period 1865-1874.

As an alternate instrument for FSB treatment status, we use the number of contraband camps in a county over the period 1860-1865. Contraband camps were areas surrounding

Union-held positions where escaped slaves and other Black individuals affiliated with the Union Army established a base. Since as of late 1861, US policy held that escaped slaves were to no longer be returned to the South, refugees to these camps were deemed "contraband of war," in reference to their status as the former property of the enemy. Many at these camps soon became involved in Union Army efforts, including on a paid basis, making them an ideal target for FSB participation following the conclusion of the Civil War.

Finally, we interact both of these instruments, which proxy the presence of a relatively dense and affluent Black population in the early post-Bellum period, with an instrument—the maximum Union (by then, US) Army troops stationed over the period 1865-1874—that captures the ease and safety with which both the newly-free Black population of the South could participate in public life, and the Northern bank managers could service FSB branches.

All three instruments and their interactions are strongly predictive of FSB adoption (see IV first-stage results in Table 14), and we do not expect for the historical presence of Black troops, contraband camps, or Reconstruction-era US troops to directly affect either the baseline demand for insurance in these localities, or—more crucially still—the post-FSB-failure *change* in the local demand for insurance.[19]

In Table 3, we present the IV results. These indicate, irrespective of choice of instrument, a statistically significant increase of roughly 4-6 agents per 1,000 households in FSB counties following the collapse of the Freedman's Savings Bank. These estimates, while slightly larger than those produced by two-way fixed effects and doubly-robust methods, tell a similar story: local insurance demand rose in the wake of the bank's failure. Furthermore, the reported test statistics underscore the relevance and exogeneity of our instruments.[20]

Given the similarity of results across instruments, and the straightforward correspondence of the "Black Troops" measure to historical motivations for FSB branch placement, going forward, we take the specification given in Column 1 as our preferred IV specification.

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[19]For instance, historical troop density does not systematically predict counties that had or that would come to have over the ensuing century a more heavily urban, affluent, or Black population—these being significant determinants of baseline insurance demand (not reported).

[20]The underidentification test reported in Table 3 is a test for instrument relevancy, where the null holds that the particular endogenous regressor in question is unidentified. Rejection of the null, which is the case here, indicates that the instrument is relevant, i.e., it predicts FSB location in the first stage. This test is estimated using (Baum *et al.*, 2022). The Weak IV confidence sets provide robust bounds of the estimated treatment effect robust to relevant but weak IVs. This is estimated using (Sun, 2018). The effective F statistic is the first stage f statistic adjusted for non-homoskedastic errors (Olea & Pflueger, 2013), and is estimated using (Pflueger & Wang, 2020). A value over 10 is typically deemed sufficient (Andrews *et al.*, 2023). Finally, the overidentification test is a test for instrument exogeneity. It requires 2 instruments and assumes that one of the instruments is exogenous. Rejection of the null indicates that instruments are endogenous, while failure to reject the null (which is the case in Column 2 and arguably only marginally not the case in Column 4) indicates that the exclusion restriction is valid.

Table 3: Instrumental Variables

INSTRUMENTS	DV: Insurance Agents Per 1,000 Households			
	Black Troops (interacted with)		Contraband Camps (interacted with)	
		Union Troops		Union Troops
	(1)	(2)	(3)	(4)
FSB × Post	5.225***	6.360***	3.939***	5.540***
	(0.874)	(0.772)	(0.753)	(0.690)
Observations	8,352	8,352	8,352	8,352
R-squared	0.711	0.703	0.713	0.709
Fixed Effects	County, Year	County, Year	County, Year	County, Year
Cluster	County	County	County	County
Effective F-Stat	11.564	19.588	11.002	43.137
UnderID P-Value	0.000	0.000	0.001	0.000
OverID P-Value		0.377		0.068
Weak IV Robust CS	[3.928 - 8.080]	[5.341 - 8.790]	[2.373 - 5.802]	[5.098 - 7.246]

Notes: Each column is a separate instrumental variable regression of *AgentsPerHH* on *FSB*, an indicator for Freedman's Savings Bank exposure, interacted with *Post*, an indicator for years subsequent to the Bank's 1874 failure, along with the noted fixed effects and time trends. All specifications instrument for endogenous selection into treatment, indicated by *FSB*. The primary instrumental variable in Columns 1-2 is *BlackTroops*, the maximum number of Black troops that occupied a county during reconstruction. The primary instrumental variable in Columns 3-4 is *ContrabandCamps*, the total number of contraband camps within a county. Columns 2 and 4 fully interact the primary instrumental variable with a second instrument, *UnionTroops*, the maximum number of Union troops occupying the county during reconstruction. The presented p-values result from Kleibergen-Paap LM underidentification tests. Rejection of the null hypothesis suggests that the excluded instruments are relevant. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

6.4 Summary

Using a variety of fundamentally different estimation strategies, each with its own distinct approach to overcoming endogeneity concerns, we have generated estimates that nevertheless tell a consistent story: following the failure of the Freedman's Savings Bank in 1874, counties with a branch location saw sharp, sustained, and statistically significant increases in the demand for insurance.[21] These increases were economically significant as well, with estimates ranging from roughly 1 to 6 additional agents per 1,000 households, equivalent to a roughly $600-$3,600 per household total increase in annual policy volume (in 2023 dollars) between the pre-collapse and post-collapse periods in these counties.

For convenience in considering these results together, we summarize our preferred specifications across these three broad classes of methods in Table 4. Column 1 features the simple

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[21]The mere existence of a branch appears to be more important than the intensity of exposure. To wit, in Table 18 in the Appendix estimates our main specification, but substituting a continuous measure of FSB exposure for our standard indicator. This continuous measure is defined as the number of Black FSB depositors that ever existed in a county per 1,000 Black households, and can be interpreted as a local "take-up" measure that captures how many in a given area were at risk of having first-hand knowledge of and/or losses due to the failure of the bank. These results show no significant effect of intensive exposure on either agents per 1,000 households or Black agents per 1,000 Black households, though they do show a significant increase in the share of insurance agents who were Black in more-exposed FSB counties.

two-way fixed effects estimation, Column 2 features two-way fixed effects with 1870 Black covariate trends, Column 3 features DRIMP estimation based on 1870 Black covariates, Column 4 features synthetic differences-in-differences, and Column 5 features an IV approach using Black Troops as an instrument. Here, estimates range from 1.598 to 5.225 additional agents per 1,000 households in FSB counties post-collapse, all statistically significant.

To address the possibility that 1850 and 1860 observations are not informative in a setting where the majority of the Black population was enslaved at the time, and therefore prohibited from the sorts of financial activity at issue in our study, in Table 19 we re-estimate Table 4 dropping 1850 and 1860 from the pre-collapse period. The results remain statistically significant, with magnitudes that are only marginally smaller than in the full sample period. Indeed, our preferred strategy, the DRIMP 1870 Black covariates specification, yields results that are nearly identical: 1.791 in the restricted sample, versus 1.796 in the standard sample, with both coefficients significant at the 1% level. Accordingly, we conclude that our results are not an artifact of incomplete or inaccurately measured pre-Emancipation data.

In the remainder of the paper, we present results using all five of the specifications laid out in Table 4 wherever econometrically feasible.[22] The rationale for this approach is that while any one technique may have idiosyncratic strengths and weaknesses, the fact that so many diverse estimation strategies all yield similar results ultimately lends confidence to our overall conclusions. In the rare cases where the doubly-robust methods cannot be estimated, we present results using the specification in Column 2 (two-way fixed effects with 1870 Black covariate trends), which is closest both in spirit and in estimated results to our most preferred estimation method, the DRIMP 1870 Black covariates specification in Column 3.

7   Mechanisms & Additional Checks

We now dive deeper into how, why, and for whom the Freedman's Savings Bank collapse shifted financial behavior. We also provide evidence that our results are not primarily driven by confounding factors. Instead, we show that these persistent changes in portfolio choice reflect a change in the affected group's attitudes toward traditional banking institutions.

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[22]In specifications 1) relying on an unbalanced panel, 2) where there are multiple distinct treatment groups (as in Table 10 and Table 6), or 3) where doubly-robust methods would be conceptually inappropriate since FSB branch locations do not dictate treatment assignment (therefore obviating the particular endogeneity concerns these methods are meant to address; as in the tables throughout Section 7.5), the doubly-robust methods cannot be implemented, and we instead rely on the other methods at our disposal.

Table 4: Main Results: Summary

| | DV: Insurance Agents Per 1,000 Households | | | | |
| | TWFE | TWFE 70B | DRIMP | SDID | IV Black Troops |
	(1)	(2)	(3)	(4)	(5)
FSB × Post	3.952***	1.598***	1.796***	2.604***	5.225***
	(0.356)	(0.375)	(0.370)	(0.346)	(0.874)
Observations	8,352	8,352	8,352	8,352	8,352
R-squared	0.713	0.754			0.711
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South

Notes: This table reproduces the main results using each of the core methods shown. DRIMP methods use 1870 Black covariates. ***
p<0.01, ** p<0.05, * p<0.1

7.1 Are Results General or Race-Specific?

The FSB targeted Black prospective customers, and it is the bank's Black depositors that ultimately bore the brunt of its failure. Moreover, its Black customers would have been those with the least prior experience of banking panics, and the fewest outside options for financial-sector participation. With the FSB collapse serving as a racialized economic shock, we might then also expect to see a racialized response. Put another way, if Black residents of FSB counties were those most exposed to FSB failure—whether through direct loss of wealth or through the event's salience in the broader community—we would expect our main results to be driven disproportionately by the shifting behavior of a county's Black residents. In this section, we test whether the results we have documented up to this point are a general phenomenon, driven by the majority white households (or white and Black households in equal measure), or whether the sharp rise in the demand for insurance post-collapse is a phenomenon specific to the local Black population.

To do so, we exploit the fact that white insurance agents could sell to all customers irrespective of race, while Black insurance agents could only sell to Black customers.[23] Thus, an absolute increase in Black insurance agents following FSB failure could only arise from changing demand on the part of Black customers. Moreover, a *relative* increase in Black agents would indicate a *disproportionate* surge in demand by Black versus other-race customers.

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[23]Historical records indicate that Black households purchased insurance primarily from white agents. That said, Black agents were also allowed to practice, even in the South—though they were restricted to Black customers, largely because premium collections were conducted door-to-door in a racially segregated setting.

Table 5:   Effects on Race-Specific Insurance Demand

	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
	DV: Black Insurance Agents Per 1,000 Black Households				
FSB × Post	1.270*** (0.168)	0.492*** (0.187)	0.533*** (0.182)	1.281*** (0.158)	1.811*** (0.383)
Observations	8,352	8,352	8,352	8,352	8,352
R-squared	0.314	0.336			0.312
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South

Notes: The dependent variable is *BlackAgentsPerBlackHousehold*. Column 1 presents results from our standard two-way fixed-effects specification, and Column 2 adds 1870 Black county-level covariate trends. Column 3 presents results from our standard DRIMP specification based on 1870 Black covariates. Column 4 presents results from our standard synthetic diff-in-diff specification. Column 5 presents results from our main IV specification, wherein the number of Black troops instruments for FSB locations. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

Table 5 presents results on the number of Black insurance agents per 1,000 Black households. All five estimation approaches show a positive and statistically significant impact of FSB collapse on Black insurance demand, with estimates falling in the 0.5-1.8 range.

For comparability with the main results on agents per 1,000 households that we present in Table 4, in Table 20 we present results on the impact of FSB failure on the number of Black insurance agents per 1,000 households (of any race). These results, too, are all statistically significant and positive, ranging from roughly 0.3-0.8 Black agents per 1,000 households. These results imply that approximately 13-20% of the marginal agents added in the wake of the bank's failure were Black. Thus, while any of the 1.5-5.2 additional agents documented in Table 4 could have theoretically been added in response to increasing Black demand, at least 13% of these agents were added exclusively to serve Black customers.

Finally, we estimate the effects of FSB failure on the share of the insurance workforce that is Black. These results are slightly noisier, perhaps reflecting among other things variation in the size of the pre-collapse (almost exclusively white) insurance workforce, and the fact that white agents could be and in many cases likely were deployed to satisfy rising Black demand. While one specification (Column 3) suggests a small but statistically insignificant negative effect on the share of insurance agents who were Black, four of our five estimation approaches (Columns 1, 2, 4, and 5) show a positive impact on this metric, with three of

these specifications (Columns 1, 4, and 5) indicating strongly statistically significant effects: namely, a roughly 4-10 percentage point increase in the share Black.

Together, these results suggest either that Black customers' preference for interacting with Black as opposed to white agents rose in response to the FSB failure shock, or that Black demand for insurance more generally rose in response to the shock. The latter is more plausible given that Black customers in the Reconstruction and later Jim Crow South likely had little influence, even indirectly, over the staffing decisions of insurance firms. Either way, these results suggest that the FSB failure was a racialized rather than a general phenomenon. These results also help assuage concerns about differential trends and the potentially endogenous placement of branches in economically ascendant regions: while we might expect insurance demand to rise more over time in dense and economically vibrant localities relative to localities without these growth prospects, we would not expect it to rise differentially by race—and save for a scenario in which the white-serving insurance market was saturated, we would especially not expect it to rise disproportionately among a less financially-advantaged group.

7.2   Do Results Merely Reflect the 1873 Panic?

The FSB collapse coincided with—and was precipitated by—another major banking shock, the Panic of 1873. With these shocks sharing an identical post period in our data, could it be that our results are simply picking up an 1873-Panic effect, rather than a Freedman's Savings Bank one? Or, from another angle: is the response to the FSB collapse *sui generis* (and perhaps reflective of its status as an unusually racially exploitative or salient episode), or does it reflect the way people respond to bank failures more broadly? If the FSB failure is "just another" bank failure, then we would expect that areas more severely hit areas in the 1873 Panic should also see an increase in insurance demand, whether in general or on a race-specific basis—and more importantly, that controlling for this crisis should eliminate our main FSB failure effect. The 1873 Panic, then, can serve as a placebo test of sorts.

To examine this, we collect annual deposit data for all (non-FSB) nationally-chartered banks from the reports of the Office of the Comptroller of the Currency. We calculate the severity of the 1873 Panic in a county as being the negative of the percentage change in total deposits for all non-FSB nationally-chartered banks in the county between 1873 and 1874, for counties that had such a bank. Counties with above-median severity are deemed to have had a severe experience of the 1873 Panic, and all other counties are deemed not to have had an especially severe experience. We then estimate a two-way fixed effects specification with 1870 Black covariate trends (our preferred specification for when DRIMP methods cannot

be implemented due to the existence of multiple treatment groups) wherein, first, the 1873 Panic effect is estimated separately, and second, the Panic's effects are estimated alongside and in interaction with the FSB failure's effects. The results are presented in Table 6.

Column 1 shows that the 1873 Panic had a positive and significant impact on the number of insurance agents per 1,000 households, albeit one about half the size of our analogous estimates of the impact of the FSB failure (see Column 2, Table 4). This shows that exposure to a severe 1873 Panic experience also appears to have shifted financial behavior—whether because of growing distrust in banks, rising risk aversion, or other factors—although Column 3 indicates that this panic did not have the sort of racialized impact that the FSB collapse did. This is perhaps unsurprising considering that depositors of all races were exposed to the 1873 Panic, while those exposed to the FSB collapse were almost exclusively Black. These results, however, suggest that to some extent, a shift toward insurance may be a natural response to banking crises generally, and that the larger effect observed in response to the FSB collapse is then reflecting both this effect, and one related to the peculiarities of that *specific* bank's failure—one that was seen as a particular betrayal of a vulnerable community.

In Column 2, we add measures of the FSB shock and its interaction with severe treatment by the 1873 Panic. Here, we see that our main FSB effects on total insurance demand survive even after controlling for the 1873 Panic, and indeed are about twice the size of the 1873 Panic effect. Moreover, we see in Column 4, which estimates the results of this specification on Black agents per 1,000 Black households, that whereas the 1873 Panic has no significant effect on race-specific insurance demand, the FSB shock does. These results therefore suggest that there is a FSB-failure effect above and beyond an 1873-Panic effect, and that the former can be viewed as a race-specific shock in a way that the latter likely wasn't.

These results on the 1873 Panic can also help us understand the role that Black households' relative inexperience with the banking system may have played in their response to the FSB collapse. The fact that the FSB failure had an effect distinct from that of the 1873 Panic could be because the FSB itself was distinct from other banks—e.g., because it almost exclusively served Black households (meaning both that almost all those exposed to its collapse were Black), or because it was unusually poorly operated (perhaps because of managers' exploitative or at the very least reckless treatment of the bank's vulnerable clientele). However, it could also be because Black customers at the time had little frame of reference for banking panics—how frequent they were, how severe they were, what risks they posed, or what customers were entitled to. For instance, Celerier & Tak (2021) suggest that FSB depositors may have been misled as to their deposits being federally insured, and show that a much smaller fraction of FSB funds were returned to (or even claimed by) depositors

Table 6:   Impact of 1873 Panic on Insurance

DV:	Agents Per 1,000 HH	Agents Per 1,000 HH	Black Agents 1,000 Black HH	Black Agents 1,000 Black HH
	(1)	(2)	(3)	(4)
Severe Panic × Post	0.897***	0.761***	0.117	0.0199
	(0.215)	(0.217)	(0.116)	(0.108)
FSB × Post		1.491***		0.389*
		(0.510)		(0.216)
Severe Panic × FSB × Post		-0.116		0.269
		(0.652)		(0.341)
Observations	8,352	8,352	8,352	8,352
R-squared	0.752	0.755	0.335	0.336
Fixed Effects	County, Year	County, Year	County, Year	County, Year
Trend	1870 Black Covariates	1870 Black Covariates	1870 Black Covariates	1870 Black Covariates
Cluster	County	County	County	County
Sample	South	South	South	South

Columns 1 and 3 are full-sample regressions of the outcome listed in the column header on *SeverePanic*, an indicator for an above-median value of 1873 Panic severity interacted with *Post*, an indicator for years subsequent to both the 1873 Panic and the FSB's 1874 failure, along with the noted fixed effects and time trends. Columns 2 and 4 add to this specification the interaction of on *FSB*, an indicator for Freedman's Savings Bank exposure, with *Post*, as well as a triple interaction between *SeverePanic*, *FSB*, and *Post*. The triple-interaction term captures the effect of FSB exposure above and beyond that of 1873 Panic exposure. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

than in typical bank runs of the time. Likewise, Traweek & Wardlaw (2021) show that white depositors, who made up about 10% of all FSB customers, were twice as likely as Black depositors to close their accounts after the financial panic of 1873 but before the failure of the FSB. While this fact may at first appear nefarious—as if white customers had been tipped off—a more "benign" explanation may simply be that unlike their Black counterparts, white FSB depositors, who enjoyed a much longer familiarity with the banking system, knew from prior experience of bank runs to liquidate their accounts while they still could. All told, this meant that many Black households' first real experience of banking—whether for nefarious or more benign reasons—was a resounding failure, and one that may have caused them to "overcorrect" beliefs vis-a-vis banking risks. For more, see Appendix A.3.

7.3   Do Results Merely Reflect a Decline in Banking Options?

One potential explanation for the rise in insurance precipitated by the FSB failure is that this event mechanically reduced banking opportunities in FSB counties. If banking options contracted following the collapse, then customers may have substituted into insurance for lack of savings alternatives, rather than out of any particular distaste for banks or affinity for life insurance. While the FSB failure in this case would nevertheless change households' financial behavior, our interpretation of the reason behind this change might shift.

To test whether a dearth of banking options following FSB failure can explain growth in insurance holdings, we first study the impact of FSB failure on banking access, measured as

the number of bank tellers per 1,000 households. These results are presented in Table 7, and indicate no statistically significant evidence of a decline in banking availability. If anything, some specifications suggest a very small but statistically significant increase in the size of the front-line banking workforce. Results are extremely similar when the outcome is the number of Black bank tellers per 1,000 households (not reported). While these results speak to the mechanical availability of local banking services, we might worry that de facto access for Black customers is circumscribed by factors like Jim Crow restrictions and the threat of racial violence—or even that insurance (as a product where one could transact from the safety of their own home) was more popular than banking only where the practical barriers to Black bank patrons were especially onerous. To test this, in the Appendix (Table 22), we interact our main treatment measures with measures of Jim Crow policies, residential segregation, and whether a county ever had a lynching. These results suggest de facto banking access (or the relative ease of life insurance versus banking) was not an important factor driving our main results—though we do find some evidence of a shift toward Black insurance agents, suggesting a greater demand for racial concordance in an environment more hostile to Black customers. Together, our results on banking access suggest that the FSB failure did not cause a banking vacuum for Black customers, whether on paper or in practice.

Next, we examine the degree to which insurance services may have substituted for banking services by testing for gradients in our main treatment effect by the extent of local banking access. These results are presented in Table 8, which gives estimates based on three alternative measures of local banking: in Column 1, the number of bank tellers per 1,000 households; in Column 2, the number of Black bank tellers per 1,000 households; and in Column 3, an indicator for whether there was ever a Black-owned bank in the county during our sample period.[24] Column 1, which takes the most general view of local banking services, suggests that the extent of local banking access did not have a significant effect on the impact of the FSB failure on local insurance demand. Notably, however, when looking at Columns 2 and 3, we see statistically significant evidence that the availability of *exclusively Black-serving banking opportunities* attenuates our main effect.

Together, these results suggest not only that local banking access did not decline following the FSB collapse, but that in general, banking may have complemented insurance. Here, there is one revealing exception that can help us better understand the mechanisms behind our paper's central results: the fact that explicitly Black-serving banking attenuates the effect of FSB failure on insurance. This suggests that Black households may have preferred to do

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[24]While Black bank tellers and Black-owned banks would only have served Black clientele, most Black customers were served by white tellers and white-owned banks. Moreover, Black-owned banks did not emerge as significant players in the Black-serving banking landscape until mid-way through our study period.

Table 7: Impact of FSB Failure on Banking Access

| | DV: Bank Tellers Per 1,000 Households | | | | |
	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
FSB × Post	0.0843	-0.0220	0.174***	0.158***	0.129
	(0.0678)	(0.0751)	(0.0591)	(0.0460)	(0.117)
Observations	8,352	8,352	8,352	8,352	8,352
R-squared	0.409	0.418			0.408
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South

Notes: The dependent variable is $TellersPerHH$. Column 1 presents results from our standard two-way fixed-effects specification, and Column 2 adds 1870 Black county-level covariate trends. Column 3 presents results from our standard DRIMP specification based on 1870 Black covariates. Column 4 presents results from our standard synthetic diff-in-diff specification. Column 5 presents results from our main IV specification, wherein the number of Black troops instruments for FSB locations. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

business with Black agents and institutions when these options were available, and that Black distrust of banks was not absolute—perhaps because the racial concordance and community trust embodied by Black client-facing workers and/or ownership helped to mitigate any broader distaste for banking that the FSB had engendered among Black customers.

7.4 Do Results Merely Reflect Broader Local Development?

Is it possible that our results on insurance demand are confounded by long-run trends in local economic development, including the growing size, sophistication, and diversity of the financial sector in affected regions? This might be a particular concern if FSB branches were located in areas with better growth prospects. If so, we might expect that in FSB counties, other financial services, including banking, real estate, and securities, would be growing at the same rate as—or perhaps even faster than—insurance.[25]

To test this, in Table 9 we examine whether insurance's share of the financial-sector workforce is growing in response to the failure of the Freedman's Savings Bank.[26] There, the bulk of evidence points to a statistically significant and roughly 2-7 percentage point increase in the share of insurance agents in the county's financial industry. Results from IV estimation are similarly positive, but statistically insignificant, while results from DRIMP estimation are negative and marginally statistically significant. Results in the Appendix (Table 23), which examine the impact of FSB failure on rates of employment in insurance, banking, real estate, and securities, corroborate the view that the insurance workforce grew

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[25]The assumption is that staffing across these types of services responds similarly to changes in demand.

[26]We find that the overall size of the financial-sector workforce, including non-insurance occupations, is growing over this period, particularly in FSB localities (see Table 23 in the Appendix).

Table 8: Life Insurance: a Substitute for Banking?

	DV: Insurance Agents Per 1,000 Households		
	All Tellers per 1,000 HH (1)	Black Tellers per 1,000 HH (2)	Ever Black Bank (3)
FSB × Post	1.002***	1.543***	1.616***
	(0.317)	(0.380)	(0.499)
Banking	-0.553**	-11.26***	
	(0.233)	(0.344)	
Post × Banking	2.463***	17.82***	1.794***
	(0.340)	(1.231)	(0.530)
FSB × Banking	0.271	15.03***	
	(0.367)	(2.558)	
FSB × Post × Banking	0.305	-12.68***	-1.583*
	(0.551)	(3.788)	(0.864)
Observations	8,352	8,352	8,352
R-squared	0.773	0.756	0.757
Fixed Effects	County, Year	County, Year	County, Year
Trend	1870 Black Covariates	1870 Black Covariates	1870 Black Covariates
Cluster	County	County	County
Sample	South	South	South

Notes: The dependent variable is *AgentsPerHH*. Column 1 augments our standard two-way fixed-effects specification (which includes 1870 Black county-level covariate trends) with terms where our main treatment terms are interacted with measures of all bank tellers per 1,000 households (Column 1) or Black bank tellers per 1,000 households (Column 2). All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** $p<0.01$, ** $p<0.05$, * $p<0.1$

disproportionately to other financial-sector workers following the shock.[27] Together, these results are suggestive of portfolio reallocation in the aftermath of the FSB's failure.

While the paper's main results (in particular, Columns 2, 3, 4, and 5 of Table 4) already account for the nonrandom placement of FSB locations—e.g., by balancing the counterfactual group of counties on observables that predict FSB branches—there are two further ways we can address concerns regarding endogenous branch placement and the potential conflation of FSB-specific effects with broader local economic development trajectories.

First, we can restrict our sample to urban counties, so as to render the counterfactual group of counties even more economically and demographically similar to the FSB counties, which tended to be more urban. These results, presented in Table 16 in the Appendix, show that our core results survive this much more conservative comparison: while coefficients are very slightly smaller than in Table 4 (consistent with some degree of selection into FSB treatment), they all remain positive, with all but one estimate significant at the 1% level.

Second, we can address concerns over the urban placement of most FSB branches by looking for FSB spillovers in places which did not themselves have an FSB branch, but were nearby to counties that did. While potentially sharing information or customer flows with

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[27]Further corroborating the outsize importance of shifts toward insurance, and using Census data from 1900-1940 which contain data on homeownership, we find no significant evidence that the FSB shock changed homeownership rates, whether across all races or among Black households (not reported).

Table 9:   Impact on Insurance's Share of Financial Employment

	DV: Share of Financial-Sector Workers in Insurance				
	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
FSB × Post	2.859*	2.027	-6.703*	6.651***	2.339
	(1.659)	(1.795)	(3.500)	(1.676)	(6.272)
Observations	8,352	8,352	8,352	8,352	8,352
R-squared	0.369	0.371			0.369
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South

Notes: The dependent variable is *PercentInsuranceIndustry*. Column 1 presents results from our standard two-way fixed-effects specification, and Column 2 adds 1870 Black county-level covariate trends. Column 3 presents results from our standard DRIMP specification. Column 4 presents results from our standard synthetic diff-in-diff specification. Column 5 presents results from our main IV specification, wherein the number of Black troops instruments for FSB locations. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

FSB locations, these areas would not share the underlying fundamentals that made locations attractive for FSB branching and, therefore, the theory goes, potentially predisposed to higher insurance demand. To explore this, we present in Table 10 binned estimates of insurance demand in FSB and nearby non-FSB counties (Column 1), and continuous estimates of insurance demand among non-FSB counties within set radii of FSB counties (Columns 2-4). Column 1 suggests the existence of spillovers within roughly 15 miles of an FSB county, after which effects dissipate. This likely reflects some combination of information flows to neighboring counties regarding the FSB collapse (where word of the bank's failure may have changed local attitudes toward insurance and banking despite no direct prior engagement with the FSB) and the spatial displacement of financial activity (a non-trivial fraction of FSB depositors lived outside the county, and to the extent that some in neighboring counties held accounts at the FSB, their depository activity would have been captured in FSB-county figures, since banking in this period was done in-branch and would require travel to FSB counties; their insurance-related activity, however, would be reflected in their own county's figures, since insurance sales/collections were done door-to-door). Columns 2-4, which iteratively expand the distance window out from 25 miles, to 50 miles, to 100 miles out from FSB counties, similarly indicate that among non-FSB counties, post-collapse surges in insurance demand diminish with distance. Together, these results are suggestive of FSB engagement (whether through information or prior banking activity) among nearby locations, and of significant insurance demand effects even in plausibly-exposed locations that did not share potentially confounding determinants of FSB placement such as urban status.

Table 10: Effects by Distance to FSB Counties

| | DV: Insurance Agents Per 1,000 Households | | | |
	Full Sample (1)	0-25 mi (2)	0-50 mi (3)	0-100 mi (4)
FSB × Post	1.172***			
	(0.390)			
0-15 mi × Post	1.225**			
	(0.526)			
15-30 mi × Post	0.0519			
	(0.111)			
Distance to FSB × Post		-0.122***	-0.0205***	-0.00187
		(0.0369)	(0.00739)	(0.00234)
Observations	8,579	702	2,862	6,183
R-squared	0.736	0.749	0.710	0.703
Fixed Effects	County, Year	County, Year	County, Year	County, Year
Trend	1870 Black Covariates	1870 Black Covariates	1870 Black Covariates	1870 Black Covariates
Cluster	County	County	County	County
Sample	South	South Excl FSB	South Excl FSB	South Excl FSB

Notes: Column 1 is a full-sample regression of *AgentsPerHH* on *FSB*, an indicator for Freedman's Savings Bank exposure, interacted with *Post*, an indicator for years subsequent to the Bank's 1874 failure, along with the noted fixed effects and time trends. Column 1 also contains interactions between *Post* and indicators for non-FSB counties within 0-15 and 15-30 miles of an FSB county. Columns 2-4 present regressions interacting *Post*, an indicator for years subsequent to the Bank's 1874 failure, with the distance in miles from an FSB county, along with the noted fixed effects and time trends. These columns are restricted to non-FSB counties within 25, 50, and 100 miles of an FSB county, respectively. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

7.5 Did the FSB Collapse Shape Beliefs and Preferences?

If persistently higher insurance demand is largely a function of the way that the FSB failure shaped the local economy—for instance, by wiping out wealth or by reducing banking opportunities—then its effects ought to stay local. If, however, it changed attitudes among those exposed, then FSB-induced demand for insurance is likely to travel with migrants.

To distinguish place-based effects from effects embodied in people, we trace cohorts of migrants from FSB to non-FSB counties, and examine their impact on insurance demand in their new destinations. We hypothesize that higher demand for insurance in locations receiving larger concentrations of out-migrating FSB cohorts indicates that the FSB failure likely had a role in changing the tastes and preferences of exposed individuals, above and beyond any effects it may have had on the economic structure of FSB localities themselves.

To test this possibility, we shift our attention to states in the North and West of the US, i.e., outside of our main analytical sample. We calculate, for each county in this new, non-FSB sample, the extent of the FSB migrant presence there in a given year from 1880 to 1940.[28] FSB migrant counts are obtained by using IPUMS MLP linked census records. In our simplest classification, we identify as FSB-exposed any Black individual who lived in the index county in the index year, and lived in an FSB county for at least one Census year

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[28]We cannot identify pre-collapse migrants (i.e., those who had migrated out by 1870) because the overwhelming majority of the Southern Black population was enslaved until after the 1860 Census, and Black migration rates immediately following the Civil War were relatively low.

between 1870 and the index year. In alternate specifications, we expand and contract this definition to explore different mechanisms for preference transmission and persistence. For more on data and methods used in our migration analysis, see Appendix D.3.1.

7.5.1 Migration as a Transmission Mechanism: Own FSB Exposure

In Table 11, we estimate the impact of exposure to FSB migrants on insurance demand in the non-Southern US—i.e., a region that did not have FSB branches, and therefore could not have experienced FSB effects directly.[29] The exposure of a destination county to FSB migrants is defined as the share of the local population of Black migrants from the South that were FSB migrants (where these Southern migrants are defined in a similar manner to FSB migrants). The rationale for the denominator in this definition is to establish the influence of FSB migrants relative to that of a group that is otherwise very similar to them. For example, to the extent that Black individuals, Southern individuals, or even migrants in general have higher baseline preferences for insurance, or choose similar destinations compared to people of other types, comparing Black FSB migrants to similar non-FSB Black Southern migrants allows us to better capture the effect attributable to FSB status specifically.

Column 1 shows that in localities where the Black Southern-origin population had a larger share of FSB migrants, there was a statistically significant positive effect on the number of insurance agents per 1,000 households. An estimated effect size of 2.146 here implies that going from a location with no FSB migrants to a location with the mean FSB share of the Black Southern-origin population would result in 0.07 additional agents per 1,000 households. Thus, it appears that even when comparing the impact of FSB migrants on their destinations relative to the impact of another group with similar characteristics and preferences, there is an increase in local insurance demand associated with their FSB status specifically.[30]

Column 2 adds controls for the growth rates of the Black population, the white population, and the Southern-origin population in order to account for the possibility that regions that are growing rapidly, or that have growing sub-populations with a high baseline taste for insurance (in particular, sub-populations, like the Southern and Black populations, that FSB migrants will mechanically inflate), may naturally see a rise over time in the local demand for insurance. The sign, magnitude, and significance are largely unchanged by the addition of these controls, whether in this or the other specification (Column 4) where they are added.

To facilitate a more like-with-like comparison given that migrants typically tended to

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[29]We exclude New York, Pennsylvania, and Texas because they had FSB branches of their own.

[30]We re-estimate Table 11 excluding FSB-origin insurance agents from the left-hand side, to avoid the possibility that these migrants are mechanically increasing the size of the insurance industry. Results in Table 11 are unchanged: i.e., migration of agents is unlikely to be an important factor (not reported).

choose more urban destinations, in Columns 3 and 4, we restrict the sample to urban counties in the non-South. Like their analogous full-sample results, these results are also statistically significantly positive, and are very similar in magnitude.

Table 11:   Impact of Migrants' Own FSB Exposure

	DV: Insurance Agents Per 1,000 Households			
	(1)	(2)	(3)	(4)
FSB Exposure (per Southern Black Pop)	2.146***	2.101***	1.703***	1.668***
	(0.305)	(0.297)	(0.303)	(0.296)
Observations	8,655	8,655	4,475	4,475
R-squared	0.406	0.412	0.465	0.470
Fixed Effects	State, Year	State, Year	State, Year	State, Year
Pop Growth Controls	No	Yes	No	Yes
Cluster	County	County	County	County
Sample	Non-South	Non-South	Urban N-S	Urban N-S

Notes: Each column is a separate regression with the dependent variable $AgentsPerHH$. The variable $FSBExposure(perSouthernBlackPop)$ measures the number of post-1870 Black migrants from the FSB counties (per our main analytic sample) living in a particular destination county in a given year, as a share of the total destination-county Black population who are post-1870 Black migrants from the South in that year. Columns 2 and 4 control for Black, white, and Southern-origin population growth. All specifications are restricted to states without an FSB branch and to post-treatment years. Columns 3 and 4 are further restricted to urban counties. To aid in interpreting effect sizes, the mean of "FSB Exposure (per Southern Black Pop)" over the period 1880-1940 is 0.0339. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

In the Appendix, we perform several additional checks. First, in Table 24, we adopt an instrumental variables strategy relying on chain migration patterns between FSB counties and the non-Southern destinations featured in our migration analysis (methods described in depth in Appendix D.3.1.) This strategy seeks to overcome both the absence of information from a pre-FSB-failure period in the main migration analysis (due to the fact that prior to the end of the US Civil War, there were likely few if any Black FSB-origin individuals living freely outside of the South), and the potential for systematic destination-choice differences of FSB-versus non-FSB migrants in the post-failure period. These IV results are consistent with the results in Table 11, and show a positive and statistically significant effect of FSB migrants on the size and racial composition of the insurance workforce in destination counties.

Second, and returning to our estimation approach with population growth controls from Table 11, we look at race-specific outcomes including Black agents per 1,000 households and the share of insurance agents who were Black. Those results, provided in Table 26, show a consistent, positive, and statistically significant relationship between exposure to FSB migrants and Black-driven increases in local insurance demand outside the South, and underscore that what we document in this paper is a race-specific phenomenon.

Third, we estimate specifications subdividing FSB-exposed migrants into two mutually exclusive categories: first, those who resided in an FSB county in the Census years flank-

ing the bank's collapse, 1870 and 1880,[31] and second, those that resided in an FSB county sometime after those two decades. We conceive of the first group as those who were there to observe the collapse first-hand, and the second as those with place-based (or local-cultural-memory-based) experience, that is, indirect exposure to the event's aftershocks, including stories, warnings, and other relevant information that may have circulated in affected communities. Separating these groups allows us to shed light on the roles of both event salience and locally-held information effects in our results. These results are presented in Table 27, which estimates the impact of both types of exposure in the same regression. In Columns 1 and 2 we see that exposure to both "first-hand" and "place-based" FSB migrants predict statistically significantly higher local insurance demand. Based on the mean county's values, first-hand effect sizes are a little over three times the size of place-based effects. Columns 3 and 4 estimate the main effect of from Table 11, but include a control for the share of the local FSB migrant population with first-hand exposure. Consistent with Table 27, our main migrant transmission results survive, and a higher share of first-hand exposed is consistently positively (though statistically insignificantly) associated with local insurance demand.

Together the results in Tables 11, 24, and 26 suggest that the FSB failure's impact on the demand for insurance is not simply a function of the way the collapse changed the financial landscape in FSB counties. Instead, they point to a role for tastes and preferences formed in FSB counties in response to the bank's failure, and carried to new locations that had neither FSB experiences of their own nor substantial pre-existing insurance demand. Moreover, the results in Table 27 suggest a role for both first-hand exposure to the FSB's collapse as well as place-based exposure over the ensuing decades—the latter encompassing some combination of both continued exposure to the structural economic effects of the shock, and the stories and memories passed on through generations and enshrined in the lore of scarred locations.

7.5.2 Sources of Intergenerational Persistence: Family FSB Exposure

The previous set of results suggest that information and preferences passed on from those who experienced the FSB failure may be important to explaining the spread and durability of the event's impact on financial behavior. To explore this mechanism further, in this section we test whether there is evidence that FSB exposure exclusively through family connections can also influence insurance demand. Specifically, we define FSB migrants as above, but now focus on the destination-county impact of those individuals who were either co-resident with or descended from an FSB migrant, but who never themselves lived in an FSB county. This

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[31]We are unable to further subdivide this group into FSB depositors versus non-depositors. Although FSB passbooks data exist, the linkable number of FSB depositors who also migrated is likely prohibitively low.

Table 12: Impact of Family FSB Exposure

	DV: Insurance Agents Per 1,000 Households	
	(1)	(2)
Family Exposure (per Family of Southern Black Pop)	1.250***	1.207***
	(0.451)	(0.441)
FSB Exposure (per Southern Black Pop)	1.609***	1.586***
	(0.299)	(0.292)
Observations	8,655	8,655
R-squared	0.411	0.417
Fixed Effects	State, Year	State, Year
Pop Growth Controls	No	Yes
Cluster	County	County
Sample	Non-South	Non-South

Notes: Each column is a separate regression with the dependent variable $AgentsPerHH$. The variable $FSBExposure(perSouthernBlackPop)$ measures the number of post-1870 Black migrants from the FSB counties (per our main analytic sample) living in a particular destination county in a given year, as a share of the total destination-county Black population who are post-1870 Black migrants from the South in that year. Family exposure refers to those who were not themselves FSB migrants, but who were co-resident with or descended from FSB migrants (or non-FSB Southern migrants in the case of the denominator in $FamilyExposure(perFamilyofSouthernBlackPop)$). Column 2 controls for Black, white, and Southern-origin population growth. All specifications are restricted to states without an FSB branch and to post-treatment years. To aid in interpreting effect sizes, we provide the following means: Family Exposure (per Southern Black Pop) Mean, 1880-1940: 0.0285; FSB Exposure (per Southern Black Pop) Mean, 1880-1940: 0.0339. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

definition of FSB exposure is indirect, and posits that FSB experiences and related advice, information, and beliefs may be passed on through generations within the household.

We present these results in Table 12. In each case, we estimate the effect of direct (own FSB) and indirect (family FSB) exposure within the same regression in order to establish whether there is a family effect on local insurance demand above and beyond that related to the presence of people from FSB counties. In all cases, family exposure is positively and strongly statistically significantly associated with destination-county insurance agents per 1,000 households. At the mean values for these variables, the impact of exposure through FSB family members is similar in magnitude to that of exposure through one's own FSB experiences. These results suggest that the transmission of tastes and experiences to those who were putatively untreated by the shock may have been an important mechanism by which the shock persistently altered financial behavior, including intergenerationally. This result also accords with the findings in Chiteji & Stafford (1999), which have emphasized the importance of social learning in the intergenerational transmission of portfolio-choice preferences, particularly among Black households.

7.5.3   Did FSB Migrant Tastes Spread to New Friends and Neighbors?: Exposure to Community Influencers

Here, we provide further evidence that the the rise in insurance agents in response to FSB migrants was not solely to satisfy their own demand. Specifically, and building on our results

regarding family transmission and social learning, we ask whether there is evidence that FSB migrants also passed their experiences on to non-FSB individuals in their new homes.

To do so, we identify individuals who would have had an outsize influence on their community's views and behavior. This is in part motivated by historical records indicating that distrust of banks and recommendations surrounding life insurance were communicated and reinforced by trusted figures in the Black community, such as pastors and local elders. We create two main classifications of influential community members, each meant to capture slightly different elements of information transmission. The first group is those in "social" occupations, i.e., occupations which naturally would have brought these individuals into contact with many others in their community, and in interactions where information is commonly exchanged. This group includes social workers, boot blacks, bartenders, barbers, and non-clergy religious workers. The second is those in "leader" occupations, i.e., occupations associated with respect, wisdom, and authority. This group includes clergy, authors, journalists, lawyers, public administrators, and teachers. As in our earlier analysis, we identify members of these occupational groups who were also FSB migrants, and examine their impact on insurance demand in their new communities. We hypothesize that these individuals should have an impact on local financial behavior that is disproportionate to that induced by FSB migrants in other occupations because they not only have the same experiences as these migrants, having also been exposed to the FSB shock, but they also have a larger and more trusted megaphone to influence the public with their views.

Table 13 presents these results. In Columns 1 and 2, we show results where exposure to these groups is defined as the number of FSB members of these occupations as a share of the total number of people in those occupations in the destination county. We can think of this measure as capturing how FSB-inflected these occupations are in a given county, or how likely one is to receive FSB messaging when interacting with these occupations. In Columns 3 and 4, we change these definitions to the number of FSB migrants in these occupations as a share of all FSB migrants. This measure essentially asks if what matters is how *influential* the local FSB population is—i.e., how trusted are the FSB communications one receives. In Columns 5 and 6, we provide a simpler measure of exposure to influential FSB-origin community members: the size of the FSB-origin group in these occupations as a share of the locality's Black population. Across all specifications, the results are consistently positive and statistically significant: the larger the FSB-migrant share of influential occupations, the larger these occupations' share of the local FSB-migrant population, and the larger their share in the overall Black population, the greater the number of insurance agents per 1,000 households. As might be expected, the impact (based on the mean county) of those in leadership occupations is consistently 2-3 times larger than for those in social occupations.

Table 13: Impact of Exposure to FSB Community Influencers

	DV: Insurance Agents Per 1,000 Households					
	(1)	(2)	(3)	(4)	(5)	(6)
FSB's Share of Social Occs	3.207**	3.055**				
	(1.250)	(1.239)				
FSB's Share of Leader Occs	5.165***	4.996***				
	(0.945)	(0.932)				
Social Occs' Share of FSB			6.031***	5.926***		
			(1.471)	(1.472)		
Leader Occs' Share of FSB			4.074***	3.984***		
			(0.991)	(0.981)		
FSB Social Occs per Black Pop					205.4***	202.8***
					(54.11)	(54.41)
FSB Leader Occs per Black Pop					253.6**	248.3**
					(100.1)	(96.01)
Observations	8,655	8,655	8,655	8,655	8,655	8,655
R-squared	0.400	0.406	0.399	0.405	0.397	0.403
Fixed Effects	State, Year	State, Year	State, Year	State, Year	State, Year	State, Year
Pop Growth Controls	No	Yes	No	Yes	No	Yes
Cluster	County	County	County	County	County	County
Sample	Non-South	Non-South	Non-South	Non-South	Non-South	Non-South

Notes: Each column is a separate regression with the dependent variable $AgentsPerHH$. The right-hand-side variables are all given in rates, where the numerator is the number of Black people in either 'social occupations" or "leader occupations," respectively, who migrated from FSB counties after 1870. Social occupations include social workers, boot blacks, bartenders, barbers, and non-clergy religious workers. Leader occupations include clergy, authors, journalists, lawyers, public administrators, and teachers. In the first two rows, the denominator is the total Black population in those occupations in the destination county. In the next two rows, the denominator is the total Black post-1870 FSB migrant population in the destination county. In the final two rows, the denominator is the total Black population in the destination county. Columns 2, 4, and 6 control for Black, white, and Southern-origin population growth. All specifications are restricted to states without an FSB branch and to post-treatment years. To aid in interpreting effect sizes, we present the following means: FSB's Share of Social Occs Mean: 0.0021; FSB's Share of Leader Occs Mean: 0.0039; Social Occs' Share of FSB Mean: 0.0014; Leader Occs' Share of FSB Mean: 0.0034; FSB Social Occs per Black Pop Mean: 0.0000; FSB Leader Occs per Black Pop Mean: 0.0000. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

Our results separating place from people effects provide compelling evidence that the FSB collapse scarred individuals rather than just localities, and in ways that persistently altered their financial behavior. Moreover, analysis of the influence of FSB migrants and their families suggests that rising insurance demand in migrant-receiving locations may reflect not only the arrival of groups with a taste for insurance, but also the influence of this group and their experiences on the broader non-FSB communities of which they became a part. Durability in these patterns is further explained by the transmission of these preferences to descendants of affected individuals, irrespective of their location.

7.6 Interpreting Mechanisms

Our analysis has shown that the failure of the Freedman's Savings Bank led to persistently higher life insurance activity in exposed counties. Crucially, regardless of the cause of these changes, the end result—a persistent and race-specific change in portfolios, with likely implications for long-run wealth accumulation (See Appendix E.1 for further discussion)—is both the same, and of economic importance. Nevertheless, there is both theoretical and policy value in discussing where these changes likely come from, and why. Throughout the paper, we have interpreted our results as reflecting an increase in consumer demand for life

insurance, and therefore, a change in financial behavior that likely impacted the size and/or composition of household portfolios. Moreover, we have interpreted this change in demand as reflecting a change in beliefs. In this section, we provide context for these interpretations.

First, we address whether demand from the FSB-exposed population drove the observed change in local insurance activity, or whether this change was the result of a concerted and opportunistic supply-side effort by the insurance industry to flood FSB-exposed markets. The evidence to support a demand-driven interpretation is extensive. First, the migration results presented throughout Section 7.5 contradict a supply-driven explanation, given that they show increased insurance activity even in localities without a failed FSB branch (i.e., those that might have been specifically targeted for insurance-industry expansion). Second, the historical literature, including archival insurance-industry records, provides no evidence of targeted marketing or expansion in FSB-exposed areas, whether before or after the bank's failure. This comports both with the actuarial calculus of insurance companies at the time (who sought to keep risk pools stable in an era of uniform policy pricing), and with the relatively small market potential that Black FSB depositors likely represented to these companies. Third, the structure of the insurance industry in this period suggests that increases in the number of agents reflect consumer demand. For instance, as Figure 1 in the Appendix shows, the relationship between the number of insurance agents employed and total policy volume generated is tightly linear, and this relationship has been extremely consistent over decades. The fact that agent productivity was constant over time suggests that insurance companies were not, e.g., speculatively hiring agents in the wake of the FSB failure, who then sat idle because no corresponding demand existed. Put another way, the existence of agents in the field implies an increase in the total quantity of policies sold. Moreover, the quantity sold was a function of demand rather than supply: the life insurance supply curve in this period was near-horizontal (Smith, 1923), and with no evidence of price changes over this timeframe (see, e.g., Gesell (1940) and many others), changes in either the number of agents employed or the quantity of policies sold can only reflect changes in consumer demand.

Second, we address whether the increase in consumer demand for life insurance that we document resulted directly from the loss of wealth, loss of opportunity, or other factors unrelated to beliefs. Here again, the evidence supports the idea that financial behavior changed not mechanically, but because people's beliefs about the relative trustworthiness of different asset classes or financial institutions changed. For one, there is extensive, qualitative, contemporary evidence documenting a change in Black Americans' beliefs regarding banks following the FSB's failure (Du Bois & Marable, 2015; Osthaus, 1976). These narratives emphasize distrust of banks specifically, more so than of financial institutions, whether white-owned or otherwise (see Appendix A.2 for examples). For another, and corroborating

the idea that behavioral change was driven by a change in beliefs, the FSB failure has been linked to higher rates of unbanked status among Black Americans today, with unbanked respondents in modern financial surveys reporting higher distrust of banks as a motivating factor (Fu, 2021).[32] Likewise, our results in Tables 12, 13, and 27 in particular document intergenerational, lateral, and "collective memory"-based effects that exist above and beyond any effects due to first-hand losses of wealth or changes to the local economy stemming from the collapse of the FSB. Relatedly, Sections 7.3 and 7.4 show no evidence of a banking vacuum, or of a broader economic collapse, that would suggest that reallocation toward life insurance was simply mechanical or "agnostic." Indeed, as shown in Table 6, the fact that bank failures during the 1873 Panic also resulted in significant increases in local insurance demand underscores the notion that banking distrust may play a role in our story. The fact that FSB effects persist above and beyond this, and the fact that FSB failure changed the racial composition of the insurance workforce while the 1873 Panic did not, suggests that bank failures were more salient to (and the extent of banking distrust generated by these adverse shocks were greater among) Black Americans. This may have been not just because the FSB targeted Black rather than white depositors, but also because of the relative inexperience of Black Americans with banking as of the early 1870s: following the failure of their first and only real experience with banking, the FSB failure likely led them to update their priors regarding the safety of bank deposits much more than it (or any similar bank failure) did for their white counterparts. Indeed, newly-emancipated Black Americans' personal experience with the FSB—which is the only way these early cohorts would have learned about the risks of depositing, since sources distilling this information were scarce at the time—would have taught them that banking crises were twice as frequent, much more likely to result in bank failures, and much more painful for depositors in failed banks, than the experience of the broader public (See Appendix A.3). Given their personal experience, it is sensible that they would shift some of their savings to repositories—namely, life insurance—either unexposed to or inversely correlated with this risk. This would have been a reasonable conclusion even if Black depositors did not feel that they had been exploited on the basis of their race. However, evidence suggests that they may have seen racism as a factor in their disastrous early banking experiences, given the unprecedented deception used to lure FSB depositors (Celerier & Tak, 2021), and the reckless disregard with which these particular depositors were subsequently treated (see Section 3). To wit, we show that the availability of Black-owned banks and Black bank tellers attenuates our main effects on local insurance demand. This suggests that racial homophily and community trust may have shaped assessments of relative risk. Put another way, the FSB failure did not deter Black Americans from saving,

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[32]Note: available data do not allow us to test the effect of FSB failure on contemporaneous unbankedness.

but they now did so either by shifting to products (e.g., life insurance) or institutions (e.g., Black-owned banks) that they felt they could better rely on.

Third—and while we have so far focused on life insurance outcomes largely for data availability reasons—we offer some commentary on why life insurance might have, on a substantive basis, been such an attractive substitute for banks at this time and to this historically underserved group. Despite being financial institutions themselves, and often being white-owned, there are nevertheless a number of reasons why Black households may have been amenable to life insurance companies even while remaining skeptical of banks. Life insurance was prevalent, popular, and readily accessible to Black customers, presenting low barriers to entry, unlike many other financial products; life insurance could be obtained from the comfort of one's home, from agents (often of the same race) with whom customers developed an ongoing personal relationship; life insurance offered similar average returns to most banks at the time, while being substantially less risky; and most life insurance agencies at the time pooled rather than segregated Black and white customers, again providing wary Black customers some assurance that these companies would not be allowed to fail as had the primarily Black-serving FSB (Arthi *et al.*, 2024). Perhaps most compellingly, Black customers would have had a much longer history with life insurance-like products prior to the FSB failure, given their historical engagement with burial insurance. This familiarity and comfort with this class of products likely mitigated any skepticism around features (e.g., white ownership, risk and severity of failure, etc.) that life insurance may have shared with banks. Beyond all this, life insurance offered substantive features—among them, the ability to borrow against the value of the policy, a commitment device for saving, and a means of resisting social pressure to lend to friends and family—that would have been attractive to consumers, particularly ones with limited financial access. However, because these features did not change relative to those offered by banks upon the FSB's failure, we conclude these were unlikely important drivers of any shift from banks and toward life insurance.

8   Conclusion

The collapse of the Freedman's Savings Bank was one of the most catastrophic bank failures in the history of the United States (Celerier & Tak, 2021). Instituted as a philanthropic organization and chartered to provide a safe savings bank for the recently-Emancipated in the immediate aftermath of the Civil War, fraudulent conduct by the bank's white management engendered the conditions for the bank's failure, resulting in the destruction of roughly 10% of Black wealth at the time (Celerier & Tak, 2021). We document the effects

of this racially exploitative and culturally scarring event on the financial behavior of Black Americans throughout the late 19th and early 20th centuries.

Specifically, we study the effect of exposure to the failure of the Freedman's Savings Bank on Black households' life insurance holdings, a historically popular savings vehicle and alternative to banking. Using a difference-in-difference framework to estimate the effect of the bank's failure on the local demand for insurance, we find that the FSB collapse accounts for 1-6 additional agents per thousand households in treated counties—an effect that is lasting, statistically significant, economically meaningful, and robust to a battery of causal estimation techniques. Critically, we find that at minimum 13-20% of this effect is driven exclusively by Black households, underscoring the racialized nature of this shock.

We also provide evidence identifying changing beliefs and preferences as a key mechanism behind the shifting behavior we document. In particular, we use the movement of FSB-exposed migrants into regions without organic FSB exposure to distinguish between the shock's effects on local economic structure, which were confined to FSB localities, and its effects on the tastes and attitudes of prospective savers, which traveled with exposed cohorts. These results show that the effects of the FSB's failure persisted across time and space through both intergenerational and community transmission of culture and beliefs.

The Freedman's Savings Bank was explicitly conceived as a teaching tool for a financially inexperienced and vulnerable group of Americans. Our paper shows that through the bank's exploitative mismanagement, its failure seems to have taught some lasting lessons of its own. Taken as a whole, our results suggest that the collapse of the Freedman's Savings Bank durably altered financial beliefs and behavior—not just among those directly affected, but also among their friends, neighbors, and descendants. These findings not only may help explain the historical prevalence of life insurance as a savings strategy among Black households, but also, to the extent that these results help explain the origins of systematic racial differences in portfolio composition, and to the extent that the relative returns to life insurance may have declined over the last 150 years, they may also have significance to ongoing debates surrounding present-day racial disparities. To wit, recent literature has implicated racial differences in portfolios—in particular, the concentration of Black wealth in lower-risk, lower-return asset classes—as an important contributor to persistent racial wealth gaps (Derenoncourt *et al.*, 2022; Kuhn *et al.*, 2020). In this context, the failure of the Freedman's Savings Bank may cast a longer shadow on the prospect of shared American prosperity—and its scars may be even farther-reaching—than previously understood.

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A   Online Appendix: Empirical Setting

A.1   The Freedman's Savings Bank: Additional Background

Established in 1865 during the Reconstruction Era, the primary stated goal of the Freedman's Savings Bank was to teach financial literacy and thrift to the nearly 4 million recently-freed Black people fighting an uphill battle to economic stability (Osthaus, 1976). Despite its philanthropic origins, the bank's management, composed exclusively of white Northern businessmen, engaged in increasingly speculative investing practices, cronyism, and corruption that ultimately caused the bank's collapse. Historians argue that the failure of the Freedman's Savings Bank contributed to a lasting distrust in savings institutions by Black Americans (Osthaus, 1976; Baradaran, 2017; Fleming, 1927).

The formation of the Freedman's Savings Bank stemmed from the military savings banks set up for Black troops during the Civil War (Osthaus, 1976; Baradaran, 2017; Fleming, 1927). As the Union Army advanced on the South, Union generals recruited Freedmen who fled their enslavement and sought refuge with Union Army camps (Dobak, 2011). Enlistment in the Union Army promised pay, but the Freedmen lacked a secure place to deposit their earnings, often spending the entire sum rather than saving it (Fleming, 1927). After hearing the success of military savings banks established by Union generals in ameliorating this problem, Reverend John Alvord recruited Northern philanthropists to petition Congress for a charter to establish the Freedman's Savings Bank, which was granted in 1865. Although Congress intended to establish a single bank in the District of Columbia (D.C.), the Freedman's Savings Bank would soon expand to 37 branches across 17 states and D.C. (Fleming, 1927).

Alvord selected New York City, the financial capital of the United States, as the bank's headquarters, but quickly set sights on establishing branches throughout the South. Alvord strategically selected cities for the bank's branches, prioritizing cities with either large Black populations or large numbers of recently-paid Black troops (Osthaus, 1976). For example, the Norfolk, Virginia and Beaufort, South Carolina branches replaced the preexisting military savings banks, while the Baltimore branch serviced the city's large Black population (Osthaus, 1976). Branch employees were instructed to pursue recently-paid soldiers in an effort to maximize deposit collection (Osthaus, 1976). As the bank proved successful throughout its first three years of operation, Black communities throughout the South applied for their own branches. The bank expanded rapidly, selecting cities with successful Black economies, and establishing branches as far as Houston (Osthaus, 1976).

Although its name suggests a direct connection with the Freedman's Bureau, a government entity focused on supporting the immediate needs of the Freedmen, the Freedman's Savings Bank was managed by a board of trustees consisting of white Wall Street businessmen, and had no connection with the federal government beyond its federal charter granted by Congress. Despite this, the bank extensively advertised in Black-owned newspapers the false impression that deposits were insured by the US federal government (Celerier & Tak, 2021; Baradaran, 2017; Osthaus, 1976). The advertising successfully attracted new depositors, 20% of whom were children or students, and the vast majority of whom were low-wage workers (Celerier & Tak, 2021; Traweek & Wardlaw, 2021).

The bank's board of trustees faulted the bank's initial Congressional charter for financially handicapping the bank. A successful Black-serving bank authorizing loans for entrepreneurship and homeownership would put depositor funds to productive use and drive economic growth (Clarke, 2019; Baradaran, 2017), but the FSB's establishment as an exclusively savings institution prohibited it from making loans (Osthaus, 1976; Baradaran, 2017). Instead, the Bank invested two-thirds of deposits in US securities, allowing only a modest return for depositors (Osthaus, 1976). With promises of higher returns for the bank's depositors, the trustees successfully lobbied Congress to amend the bank's charter in 1870, authorizing management to invest depositor funds in speculative securities (Osthaus, 1976; Baradaran, 2017). This amendment transitioned the Freedman's Savings Bank from a safe place to hold savings to a speculative investment institution, undermining the bank's core mission.

According to Celerier & Tak (2021), who compile an exhaustive dataset of both the Bank's loans and advertisements, despite the fact that roughly 90% of FSB depositors were Black, 80% of loans went to white borrowers (including 15% to elected officials, 41% to public and real estate contractors, and 13% to railroad investors), and the vast majority of loans were fraudulent and never repaid (Celerier & Tak, 2021). Further, bank management deliberately exploited depositors by intensifying advertisement efforts in response to the Bank's new charter in an attempt to enlarge the pool of deposits to plunder (Celerier & Tak, 2021). Consequently, instead of facilitating loans that benefited depositors, the bank's management effectively transferred the savings of the Freedmen to white elites.

Henry Cooke, chair of the bank's financial committee and brother of banker Jay Cooke, managed the bank's finances, making loans to several companies the Cooke family had a personal stake in (Osthaus, 1976; Baradaran, 2017). When Jay Cooke's bank failed in 1873, triggering the Financial Panic of 1873 and a run on the banks, the Freedman's Savings Bank was obligated to liquidate its sound securities to satisfy depositor demand (Osthaus, 1976). The bank may have survived the panic if not for its speculative loans, many of which

were illiquid and made at low interest (Osthaus, 1976). While the bank survived the run, it ultimately could not cover its expenses and closed in July of 1874 (Osthaus, 1976). The bank's trustees elected a commission responsible for liquidating the bank's remaining assets and refunding depositors, ultimately declaring five dividends over the course of nine years amounting to 62% of total deposits owed, although only 19.8% of deposits were recouped on average (Celerier & Tak, 2021; Osthaus, 1976). Congress debated reimbursing depositors fully, but the legislation lacked sufficient political support for enactment.

The consequences of Freedman's Savings Bank's failure were severe, wiping out half of depositor wealth in its wake (Baradaran, 2017), or about 10% of the wealth of its target population of Black households (Celerier & Tak, 2021). For the Freedman, this loss was certainly consequential—but even compared to other national bank failures, the collapse of the Freedman's Savings Bank remains among the most severe in history (Celerier & Tak, 2021). Further, the Freedmen's relative inexperience in engaging with financial institutions likely exacerbated the psychologically scarring effects of this failure. Traweek & Wardlaw (2021) analyze the passbook activity of FSB depositors and find that white depositors, who comprise 10% of total depositors, were more than twice as likely to withdraw deposits following the onset of the 1873 Financial Panic than were Black depositors. Consequently, Black depositors were exploited both through false advertisements to fuel the plunder by white elites, and through their inexperience in the banking sector. The result was a wealth transfer from Black to white Americans.

Following the bank's failure, the belief that the bank was a mechanism through which whites could swindle Blacks of their economic prospects circulated throughout Black communities (Osthaus, 1976). Contemporaneous quotes provided in Appendix A.2 vividly illustrate the view among Black households that they had been specifically targeted for exploitation. The decimation of Black savings contributed to deep distrust of the banking institution, likely stifling Black economic development (Baradaran, 2017; Kinzer & Sagarin, 1984). According to W.E.B. Du Bois, "Not even ten additional years of slavery could have done so much to throttle the thrift of the freedmen..." than the failure of the Freedman's Savings Bank (Du Bois & Marable, 2015, p. 36). In 1913, almost 40 years after Freedman's collapse, bank president Richard Henry Boyd remarked that community elders, still scarred by the Freedman's Savings Bank collapse, had continued to instill distrust of banks in their children (Osthaus, 1976, p. 224). Consequently, Black-owned and Black-serving banks struggled to attract Black depositors for decades after the Freedman's Savings Bank collapse, with Black Americans often opting to store excess cash at home or with the Postal Savings System (Osthaus, 1976; Thieblot Jr & Fletcher, 2016; Kinzer & Sagarin, 1984).

Little is known about the effects of the rise and fall of the Freedman's Savings Bank on Black economic development beyond the qualitative assessments of historians.[33] Interest in this topic has recently emerged, however, with scholarship examining the determinants of Black inclusion in the banking system, the effects of the Freedman's Savings Bank on its depositors' human capital, and the long-term consequences of the bank's failure (Stein & Yannelis, 2020; Celerier & Tak, 2021; Traweek & Wardlaw, 2021; Fu, 2021). Notably, Fu (2021) finds that the failure of the Freedman's Savings Bank contributed to present-day distrust of banking institutions, as 21st century Black households residing in counties with historically high exposure to the bank's failure are less likely to engage with the banking system. Evidence on the short-term effects of the bank is mixed, with some studies finding that the bank prior to its failure provided significant educational and economic benefits to its depositors (Stein & Yannelis, 2020; Fu, 2021), although this finding is a matter of debate in the literature (Celerier & Tak, 2021). Our study is the first to assess how the psychological and cultural scarring effects resulting from the failure of the Freedman's Savings Bank—above, beyond, and distinct from any effects of the bank's collapse on the economic structure of FSB localities—affected Black financial behavior throughout the 19th and 20th centuries.

A.2 Contemporaneous Perceptions of FSB Failure

A wide range of primary and secondary evidence suggests that the failure of the Freedman's Savings Bank cast a long shadow on Black participation in banking (see, e.g., Osthaus (1976); Celerier & Tak (2021); Fu (2021); Traweek & Wardlaw (2021)). This appears to have been in large part because Black Americans—both community leaders and everyday people alike—viewed the bank as, at best, an implicitly racist institution that acted with reckless disregard for its relatively powerless clientele, and at worst, a malicious swindle that had intentionally cheated a socially, politically, and economically vulnerable population. Below we provide a sampling of passages from Osthaus (1976), one of the seminal historical works on the FSB, that illustrates both the perception that the bank had operated in bad faith, and the widespread scarring effect its failure had on Black Americans.

- "To salvage their own self-respect and to explain the unbelievable cataclysm, many blacks came to believe the legend that from the beginning the whole operation had been a conspiracy to swindle the freedmen, to engage their trust by moral preachment the better to cheat them of their savings." (pp. 201–202)

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[33]A related literature on the economic history of Black-owned and Black-serving banks more broadly, however, is also emerging in economics; see, e.g., Clarke (2019).

- "Other black leaders angrily denounced those whom they held responsible for the Bank's faulty if not criminal management. Abe Smith, a member of the Nashville advisory board, placed the blame solely on the Washington officers; these men had brought sorrow and hardship to Nashville depositors -washerwomen, crippled soldiers, and 'that class of people.'" (p. 203)

- "'Rotten as the devil' was the way Nelson Walker, another Nashville board member, described affairs at Washington. 'I spent some time last summer in Washington and got an insight into its management. The money of the bank has been habitually invested there contrary to the charter. It has been used in 'beautifying' the city. My confidence was then shaken in its management.' Several depositors, Walker added, had resolved never again to 'trust any bank to the extent of a dollar.' A great many depositors seem to have shared Walker's distrust of banks." (p. 203)

- "Mass protest meetings held in several cities in late 1874 and early 1875 absolved Frederick Douglass and the other black officials of blame for the failure and denounced the 'rascals,' 'thieves,' and 'swindlers' who had caused the tragedy. For example, Washington Negroes gathered at the Union Bethel Church in September to hear Charles B. Purvis announce that friends of the Negro and 'some grand rascals' had managed the Bank, and that the rascals and the panic had caused the failure." (p. 206)

- "A particularly strong protest movement developed at Baltimore in the fall... The assembled depositors adopted resolutions accusing the Bank of being an 'artful dodge to swindle poor colored people out of their hard-earned money.'" (p. 207)

- "The government's refusal to shoulder the Bank's debts must have been a sickening disappointment to the freedmen. Shocked by the Bank's failure, enraged by the revelations of the management's frauds, and disgusted by the commissioners' apparent mismanagement of the receivership, the depositors finally found appeals to the United States government, their last resort, quite fruitless... A straight, once-and-for-all monetary loss might have been less scarring than the interminable decades of promises and disappointments, the hopes raised only to be dashed." (p. 220)

- "In 1910 a congressional hearing on a bill to reimburse the depositors revealed just how little the intervening years had diminished the sense of sadness, disillusionment, bitterness, and outrage that had attended the Bank's closing. It was as though the Bank had failed only recently, not thirty-six years ago." (pp. 220–221)

- "In 1913, on the ninth anniversary of the bank's (Nashville's One-Cent Savings Bank and Trust Company) opening, its first president spoke about the persistent distrust bank's Tennessee blacks: 'Some of the elder citizens still living remember and often refer to the lamented calamity of the so-called Freedman's Savings bank. They have transmitted this lamented tradition to their children. And for years throughout the length and breadth of State of Tennessee, and many other parts of the South, whenever a Negro banking institution was referred to the cry was always raised by them... 'Remember the Freedmen's Bank.'"" (p. 224)

A.3   Context for the Appeal of Life Insurance

The observed increase in savings via legal reserve life insurance after the failure of the FSB could be the result of several processes ranging from rational to behavioral, race-neutral to racially motivated. Below we touch on just a few reasons why life insurance may have proved appealing to Black customers where banking did not.

One possibility is rational Bayesian updating of the probabilities of losing funds in banks during troubled times. The freedmen who saved in the FSB had little financial experience and lacked information about the risk, frequency, and severity of banking panics which occurred periodically in the late nineteenth and early twentieth centuries. The FSB failed 10 years after its founding. Depositors lost about half of their savings. In this era, banking panics occurred about once every twenty years (Jalil, 2015). Only a small fraction of banks failed during panics (Richardson, 2007). Losses to depositors in failed banks seldom exceeded 10%. Thus, the personal experience of Black Americans with the FSB—which is the only way most of them would have learned about the risks of depositing, since sources distilling this information were scarce at the time—would have taught them that banking crises were twice as frequent, much more likely to result in bank failures, and more painful for depositors in failed banks than the experience of the broader public. Given their personal experience, Black households would sensibly shift some of their savings to repositories unexposed or inversely correlated with this risk.

Legal reserve life insurance companies were institutions of precisely this type. They could not be subject to runs. They held safe portfolios whose value held steady or increased during most recessions. They served as a reservoir of funds, and their policy loans served as a lifeline for policyholders during difficult times (Jaqua, 1951). Training materials for life insurance agents at the time told them to explain life insurance's use as a hedge against financial downturns to prospective clients (Stalson, 1942; Hedges, 1956). Given Freedmen's personal experience with banking, the hedge-against-banks argument for insurance may have

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been particularly salient to them and induced them to place more of their funds into equity-accumulating life insurance policies than the broader population which had, on average, a much better experience with banks.

A related point discussed in training materials for life insurance agents was to emphasize the safety and advantages of entrusting one's funds to a national conglomerate rather than a local bank. Banking regulations prohibited branching. Most banks operated out of a single building in a single town. None operated locations across state lines. Local banks had failure rates much higher than large banks at the center of the financial system in Manhattan. None of the ten largest banks in New York (and thus the whole United States) failed with losses to depositors from the founding of our Republic until today. The same is true with the large life insurance corporations headquartered in New York and New England. Like the large Manhattan banks, they never failed. While it was possible for individuals from anywhere in the nation to deposit funds in a New York bank, it was difficult and costly to do so, and therefore, seldom done. The large East Coast insurance corporations operated differently. They had agents and subsidiaries operating throughout the nation. The largest had an agent located in every county, and in many places, every large town. By the early twentieth century, their agents canvassed most neighborhoods and had knocked on most doors in the nation. Their local efforts extended throughout Southern states. Their histories indicate that their local agent networks began soliciting Black Americans living throughout the South in the 1870s.

Less rational and more behavioral explanations along these lines—in particular, those grounded in a desire by Black customers to minimize their exposure to racism—also could be offered. The FSB failure may have taught Black households (rightly or wrongly) to fear or mistrust banks, bank regulations, bank regulators, or the federal government. Fears along these lines would lead Black households to save more through life insurance corporations. As discussed in Arthi *et al.* (2024), the life insurance industry was organized in such a way to avoid these concerns. To wit, life insurers were regulated by state rather than the federal government. Most insurance contracts (by number and value) were issued by firms that did business in New York and Massachusetts and were, therefore, subject to strict regulations in those states. Black customers may also have feared being segregated into financial institutions set up primarily for them but controlled by whites. In the 1870s, insurance companies were run by whites, but were not segregated. Blacks and whites purchased insurance on the same terms, with the same contracts, and from the same agents. Over time, insurance companies employed increasing numbers of Black agents to serve Black customers, particularly in the rural south and urban North, and Black businesspeople eventually formed a growing number of independent insurance companies so that Black customers could purchase

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insurance from within their own community.

A.4 Life Insurance Industry: Background

Figure 1: Agents and Insurance in Force, 1920-1940
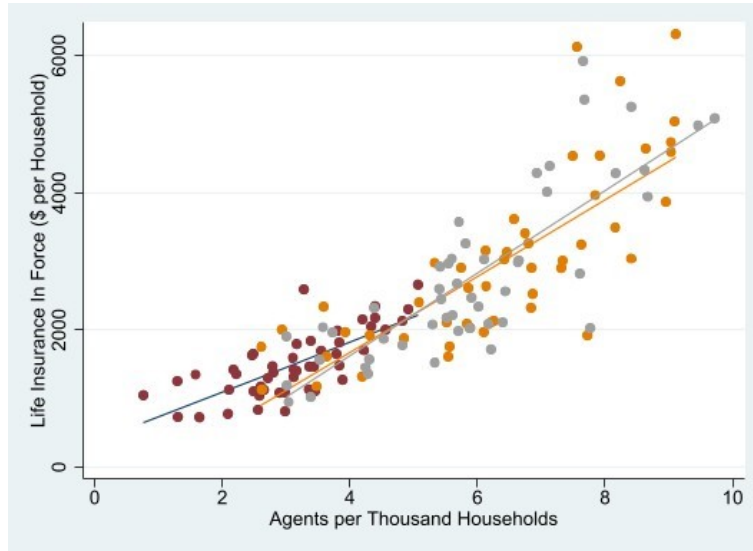
Sources: Statistical Abstract of the United States (various years) and United States Census of Population (various years).
Notes: Figure plots insurance agents per thousand households measured at the state level and the life insurance in force in nominal dollars per household measured at the state level for the years 1920 (red dots), 1930 (orange dots), and 1940 (grey dots). A fitted line is also plotted for each year.

B Online Appendix: Estimation Strategy

B.1 Doubly Robust Methods

First, we supplement our two-way fixed effects results using propensity score methods to aid identification in equation 1. Propensity score methods rely on the assumption that selection into treatment is random conditional on a set of predictive covariates. This set of pre-treatment covariates performs best if correlated with both the treatment and the outcome Garrido *et al.* (2014). Instrumental variables, however, should be excluded from the covariate vector as these variables do not address the problem of confounding.

Our first specification estimates a semiparametic DiD model using stabilized inverse-probability weights (IPW) developed by Abadie (2005). We estimate the probability of

treatment assignment using 1870 county averages by race of literacy and employment rates, as well as wealth, urban status, socio-economic status (proxied by occscore), and family size. Data for these exercises come from the decennial US Census (details in Section 5). IPW methods estimate a counterfactual by placing high weights on treated counties with a low probability of treatment and control counties with a high probability of treatment. This estimate can be combined with outcome regression techniques developed by Heckman *et al.* (1997), resulting in the doubly-robust (DR) DiD estimators developed by Sant'Anna & Zhao (2020). Specifically, these estimation methods use a vector of pre-treatment covariates to provide consistent estimates of the ATT if either the propensity score model or the outcome regression model is specified correctly. The first specification, DRIPW, estimates the propensity score model via maximum likelihood and the outcome regression model using ordinary least squares. The second specification, DRIMP, improves on this specification by estimating propensity scores using the inverse probability tilting estimator and weighting the outcome regression by a function of these estimated probabilities. This estimator is both doubly-robust for consistency and inference. These estimators help reduce bias in TWFE estimates when there are covariate trends in both treatment and control groups (Sant'Anna & Zhao, 2020).

The doubly-robust DiD methods require correctly specified propensity score and outcome regression models to develop a counterfactual control group. Such a method may be sensitive to the choice of covariates and availability of relevant data. The synthetic DiD method, developed by Arkhangelsky *et al.* (2021), is robust to these concerns. Specifically, the synthetic DiD estimator constructs a counterfactual control group using both pre-treatment values of the dependent variable, $AgentsPerHH$, and time effects of the control group. The estimator is doubly-robust, in that it needs only the unit weights constructed from the pre-treatment period, or time weights constructed from the control group, to be effective at removing bias to produce consistent ATT estimates. We employ the synthetic DiD estimator as our final robustness check using doubly-robust methods.

B.2   Instrumental Variables

Second, we adopt an instrumental variable estimation approach to address the endogenous selection of counties into treatment. The required instrument must predict the counties selected for a Freedman's bank branch, but be orthogonal to a location's baseline household demand for insurance. This identification method is strengthened by the ample historical record of FSB management's selection process. Specifically, the historical record makes clear that FSB branches were initially located in counties with a high population of Black

Union soldiers, as it was originally intended to encourage thrift among this population and to absorb their paychecks. Accordingly, we use $MaxBlackTroops$, the maximum number of Black troops in a county during reconstruction, as our primary instrument. We further interact this instrument with $Occupation$, which measures the maximum total number of troops in a county. The rationale for this is to account for the accessibility of Southern counties by the Northern bank managers and potential customers, who required safe passage to a bank branch since the South remained hostile towards the Freedmen and their associates in the aftermath of the Civil War. For this measure, we use the Mapping Occupation dataset by Downs & Nesbit (2016), which provides the location and date of white and Black army troops from 1865-1880

We argue that our proposed instruments satisfy the two identifying assumptions. First, both historical accounts and empirical evidence demonstrate the predictive power of our instruments, indicating that the instruments are relevant. Further, we contend that $MaxBlackTroops$ only influences $AgentsPerHH$ through the financial scarring induced by the failure of the Freedman's Savings Bank. Our data indicates that Union Army troops were highly mobile, and therefore their presence was unlikely to affect long-term local preferences for life-insurance holdings. We also present a second instrument, $Contraband$, which indicates the total number of so-called "contraband camps" in each county. Contraband camps were refugee camps for ex-slaves, and are predictive of the location of FSB branches. Data on the location of contraband camps come from Cooper (2014). These instruments provide exogenous variation in the location of FSB branches and identify local average treatment effects of the failure of the FSB on household insurance holdings.

C Online Appendix: Data

Figure 2: Insurance Agents per 1,000 Households, 1870

Figure 3: Freedman's Savings Bank Counties

D Online Appendix: Results

D.1 Main Results

D.1.1 Additional Evidence: Doubly-Robust Methods

Figure 4: DRIMP Event Studies

1870 White & Black Covariates   1870 Black Covariates
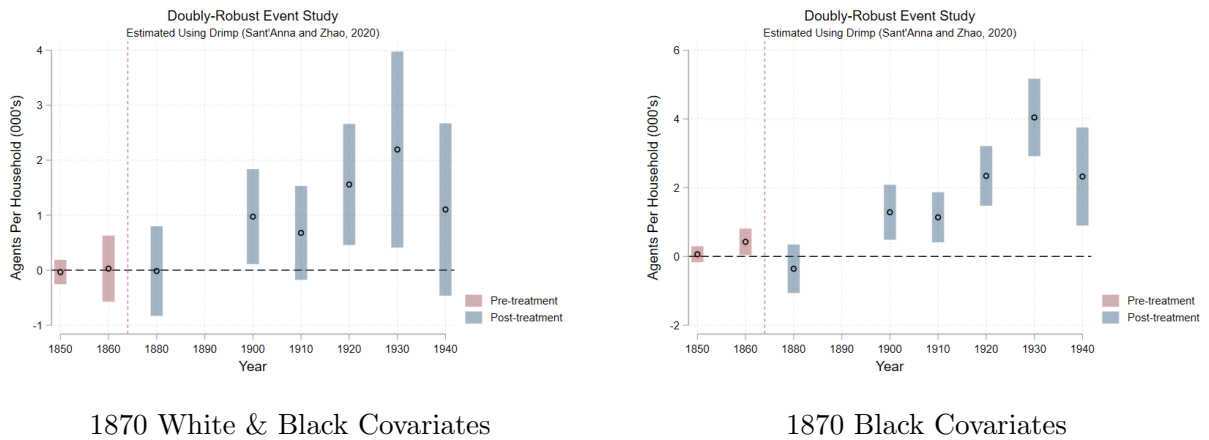
Figure 5: Synthetic Differences-in-Differences
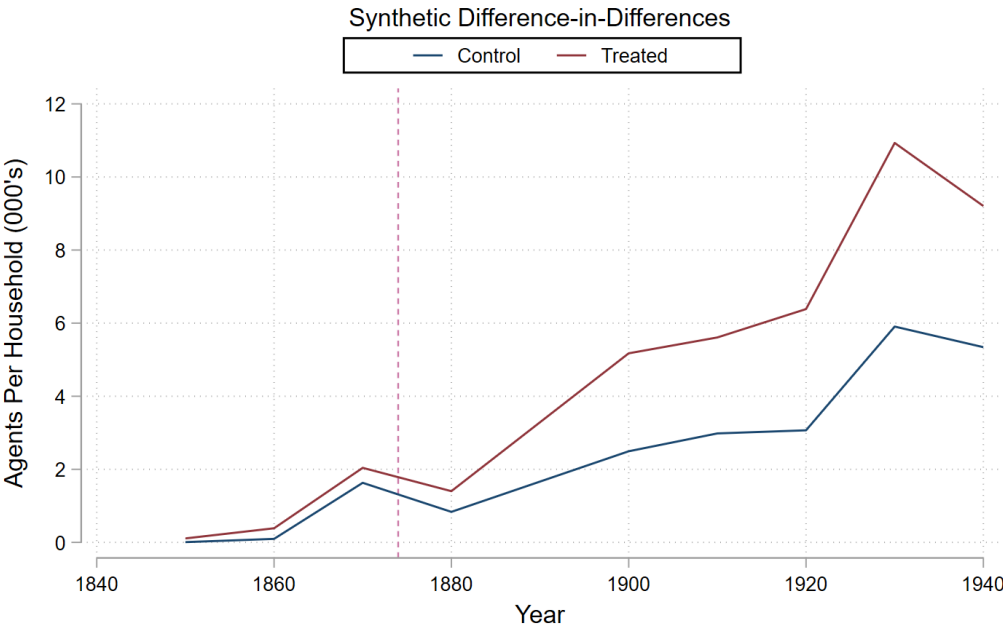
D.1.2 Additional Evidence: Instrumental Variables

Table 14: Instrumental Variables: First-Stage Results

	DV: FSB × Post			
	(1)	(2)	(3)	(4)
Union Troops × Post		3.88e-05***		3.11e-05***
		(6.98e-06)		(7.40e-06)
Black Troops × Post	0.000157***	0.000114**		
	(4.34e-05)	(5.33e-05)		
Black Troops × Union Troops × Post		-3.61e-09		
		(1.17e-08)		
Contraband Camps × Post			0.0729***	0.0313
			(0.0207)	(0.0197)
Contraband Camps × Union Troops × Post				1.11e-05***
				(3.84e-06)
Observations	8,352	8,352	8,352	8,3522
R-squared	0.730	0.770	0.718	0.783
Fixed Effects	County, Year	County, Year	County, Year	County, Year
Cluster	County	County	County	County
F-Statistic	13.010	22.038	12.378	48.532

Notes: Each column presents first-stage results underlying the results reported in the main instrumental variable regression table. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

D.2 Robustness and Mechanisms

D.2.1 Urban Status

Table 15: Accounting for Urban Status: TWFE

	DV: Insurance Agents Per 1,000 Households					
	Baseline (1)	Baseline (2)	Urban 1870 (3)	Urban 1870 (4)	Above Med Urban (5)	Above Med Urban (6)
FSB × Post	3.952***	1.598***	1.823***	0.779*	2.401***	1.268***
	(0.356)	(0.375)	(0.443)	(0.415)	(0.367)	(0.356)
Observations	8,352	8,352	711	711	2,286	2,286
R-squared	0.713	0.754	0.842	0.864	0.821	0.838
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 B	No	1870 B	No	1870 B
Cluster	County	County	County	County	County	County
Sample	South	South	Urban 1870 South	Urban 1870 South	Urban South	Urban South

Notes: The dependent variable is *AgentsPerHH*, and is regressed on *FSB*, an indicator for Freedman's Savings Bank exposure, interacted with *Post*, an indicator for years subsequent to the Banks 1874 failure, along with the noted controls and fixed effects. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. Columns 3-6 are restricted to urban counties in these states, where urban status is alternatively defined as those with any urban population in 1870 (Columns 3-4) or those with urban status over at least half of the sample period (Columns 5-6). *** p<0.01, ** p<0.05, * p<0.1

Table 16: Effects Among Urban Counties: Summary

	DV: Insurance Agents Per 1,000 Households				
	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
FSB × Post	2.401***	1.268***	0.684	1.937***	2.002***
	(0.367)	(0.356)	(0.455)	(0.425)	(0.686)
Observations	2,286	2,286	2,286	2,286	2,286
R-squared	0.821	0.838			0.821
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	Urban South	Urban South	Urban South	Urban South	Urban South

Notes: This table reproduces the main results using each of the core methods shown. DRIMP methods use 1870 Black covariates. Sample is restricted to counties in the main Southern sample with urban status over at least half of the sample period. *** p<0.01, ** p<0.05, * p<0.1

D.2.2 Pent-Up Demand

Table 17: Accounting for Pent-Up Demand

| | DV: Insurance Agents Per 1,000 Households | | | | | | | |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Percent Enslaved × Post-CW	-0.0346				-0.629**			
	(0.0878)				(0.282)			
Percent (Free) Black		-0.342				-0.394		
		(0.268)				(0.768)		
FSB × Post			2.272***	0.765**			1.967***	1.038**
			(0.478)	(0.381)			(0.481)	(0.455)
Observations	2,784	3,408	1,152	1,152	762	1,500	918	918
R-squared	0.456	0.608	0.840	0.880	0.547	0.609	0.864	0.889
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	No	No	1870 B	No	No	No	1870 B
Cluster	County	County	County	County	County	County	County	County
Sample	South	US	NY & PA	NY & PA	Urban South	Urban US	Urban NY & PA	Urban NY & PA
Years	1850-1870	1850-1860	1850-1940	1850-1940	1850-1870	1850-1860	1850-1940	1850-1940

Notes: Each column is a separate regression with dependent variable *AgentsPerHH*. Explanatory variables, samples, and year ranges vary across specifications. Here, urban status refers to counties that had urban status over at least half of the sample period, though results are extremely similar when defining urban status by counties with any urban population in 1870. *** p<0.01, ** p<0.05, * p<0.1

D.2.3 Intensive Exposure to FSB

Table 18: Effects of Intensive-Margin Exposure to FSB Failure (FSB Counties)

DV:	Agents Per 1,000 HH (1)	Black Agents Per 1,000 Black HH (2)	Share Black (3)
FSB Intensity × Post	-0.349	0.120	1.798***
	(0.245)	(0.162)	(0.615)
Observations	216	216	216
R-squared	0.913	0.690	0.542
Fixed Effects	County, Year	County, Year	County, Year
Trend	1870 Black Covariates	1870 Black Covariates	1870 Black Covariates
Cluster	County	County	County
Sample	South	South	South

Notes: This table reproduces the main results TWFE 1870 Black covariates results, but substitutes for the FSB indicator a continuous measure of the intensity of FSB exposure, defined as the number of Black FSB account holders that ever existed in the county per 1,000 Black households. The regression is restricted to FSB counties so as to more cleanly measure the intensive-margin effect of FSB exposure. *** p<0.01, ** p<0.05, * p<0.1

D.2.4 Pre-Period Checks

Table 19: Restricting Pre- Period to 1870

	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
	DV: Insurance Agents Per 1,000 Households				
FSB × Post	2.914***	0.880**	1.791***	2.914***	3.964***
	(0.321)	(0.343)	(0.368)	(0.323)	(0.772)
Observations	7,826	7,826	7,826	7,826	7,826
R-squared	0.738	0.764			0.737
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South
Years	1870-1940	1870-1940	1870-1940	1870-1940	1870-1940

Notes: This table reproduces the main results using each of the core methods shown, but with the pre-collapse period restricted to 1870. DRIMP methods use 1870 Black covariates. *** p<0.01, ** p<0.05, * p<0.1

D.2.5 Race-Specific Demand

Table 20: Effects on Black Insurance Agents per 1,000 Households

	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
	DV: Black Insurance Agents Per 1,000 Households				
FSB × Post	0.523***	0.276***	0.280***	0.523***	0.777***
	(0.0749)	(0.0769)	(0.0802)	(0.0828)	(0.164)
Observations	8,352	8,352	8,352	8,352	8,352
R-squared	0.402	0.460			0.396
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South

Notes: The dependent variable is $BlackAgentsPerHousehold$. Column 1 presents results from our standard two-way fixed-effects specification, and Column 2 adds 1870 Black county-level covariate trends. Column 3 presents results from our standard DRIMP specification based on 1870 Black covariates. Column 4 presents results from our standard synthetic diff-in-diff specification. Column 5 presents results from our main IV specification, wherein the number of Black troops instruments for FSB locations. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

Table 21: Effects on Share of Insurance Agents Black

	DV: Share of Insurance Agents Black				
	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
FSB × Post	4.316*** (0.912)	0.481 (0.819)	-0.894 (0.920)	4.183*** (0.860)	10.00*** (3.047)
Observations	8,352	8,352	8,352	8,352	8,352
R-squared	0.267	0.315			0.264
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South

Notes: The dependent variable is *PercentBlackAgents*. Column 1 presents results from our standard two-way fixed-effects specification, and Column 2 adds 1870 Black county-level covariate trends. Column 3 presents results from our standard DRIMP specification based on 1870 Black covariates. Column 4 presents results from our standard synthetic diff-in-diff specification. Column 5 presents results from our main IV specification, wherein the number of Black troops instruments for FSB locations. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

D.2.6 Jim Crow

Table 22: Mediating Effect of Jim Crow/Threat of Racial Violence

DV:	Agents Per 1,000 HH (1)	Agents Per 1,000 HH (2)	Agents Per 1,000 HH (3)	Share Black (4)	Share Black (5)	Share Black (6)	Black Agents Per 1,000 Black HH (7)	Black Agents Per 1,000 Black HH (8)	Black Agents Per 1,000 Black HH (9)
FSB × Post	1.555*** (0.386)	3.801*** (1.442)	1.286* (0.683)	-0.108 (0.742)	-1.057 (2.359)	-0.321 (0.863)	0.339* (0.191)	0.832 (0.687)	0.389 (0.290)
FSB × Post × HRR Index	0.0318 (0.382)			1.421** (0.686)			0.284* (0.166)		
FSB × Post × Segregation Index		-4.752 (3.069)			3.471 (4.796)			-0.756 (1.431)	
FSB × Post × Ever Lynching			0.462 (0.760)			1.273 (1.267)			0.116 (0.337)
Observations	7,371	8,352	8,352	7,371	8,352	8,352	7,371	8,352	8,352
R-squared	0.757	0.754	0.754	0.312	0.315	0.315	0.349	0.336	0.337
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	1870 Black Cov	1870 Black Covs	1870 Black Cov	1870 Black Cov	1870 Black Cov	1870 Black Cov	1870 Black Cov	1870 Black Cov	1870 Black Cov
Cluster	County	County	County	County	County	County	County	County	County
Sample	South	South	South	South	South	South	South	South	South

Notes: The dependent variable is *AgentsPerHH* (Columns 1-3), *ShareBlack* (Columns 4-6), and *BlackAgentsPerBlackHH* (Columns 7-9). All columns augment our standard two-way fixed-effects specification (which includes 1870 Black county-level covariate trends) with terms where our main treatment terms are interacted with measures of Jim Crow severity (Columns 1, 4, 7), the extent of residential segregation by race (Columns 2, 5, 8), or whether a county had ever recorded a lynching (Columns 3, 6, 9). All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

D.2.7 Change in Financial-Sector Employment

Table 23: Change in Financial-Sector Employment by Type

	TWFE (1)	TWFE 70B (2)	DRIMP (3)	SDID (4)	IV Black Troops (5)
	DV: Number of Financial-Sector Workers per 1,000 HH				
Panel A: Insurance Workers					
FSB × Post	7.811***	2.604***	4.222***	5.867***	9.631***
	(0.839)	(0.805)	(0.776)	(0.762)	(1.734)
R-squared	0.689	0.755			0.687
Panel B: Bank Workers					
FSB × Post	1.828***	-0.564	1.529**	2.426***	2.182**
	(0.631)	(0.612)	(0.710)	(0.417)	(0.886)
R-squared	0.727	0.765			0.727
Panel C: Real Estate Workers					
FSB × Post	5.150***	2.122***	3.648***	4.812***	5.260***
	(0.731)	(0.751)	(0.626)	(0.706)	(1.025)
R-squared	0.399	0.428			0.399
Panel D: Securities Workers					
FSB × Post	-0.299	-0.350	0.992***	0.234	-0.318
	(0.273)	(0.270)	(0.312)	(0.180)	(0.297)
R-squared	0.361	0.363			0.36
Observations	8,352	8,352	8,352	8,352	8,352
Fixed Effects	County, Year	County, Year	County, Year	County, Year	County, Year
Trend	No	1870 Black Covariates	No	No	No
Cluster	County	County	County	County	County
Sample	South	South	South	South	South

Notes: The dependent variable is the number of financial sector workers of a given type per 1,000 households, where Panel A presents results for insurance workers, Panel B for bank workers, Panel C for real estate workers, and Panel D for securities workers. Column 1 presents results from our standard two-way fixed-effects specification, and Column 2 adds 1870 Black county-level covariate trends. Column 3 presents results from our standard DRIMP specification. Column 4 presents results from our standard synthetic diff-in-diff specification. Column 5 presents results from our main IV specification, wherein the number of Black troops instruments for FSB locations. All models are restricted to primarily Southern states, including Arkansas, Florida, Georgia, Kentucky, Louisiana, Maryland, Missouri, North Carolina, South Carolina, Tennessee, Washington D.C., and West Virginia. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

D.3 Migration Analysis

D.3.1 Migration Data and Methods

We follow FSB-exposed Southern migrants over time and space by using the IPUMS Multi-generational Longitudinal Panel, which links individuals across censuses (Ruggles *et al.*, 2019). Starting in 1870, we assign exposure to the FSB collapse to migrants if these migrants have ever lived in a county containing an FSB branch, and consider individuals directly exposed if they lived in an FSB county in either 1870 or 1880. This approach allows us to compare the scarring effects of direct exposure to the FSB collapse with intergenerational in-

direct effects. To further probe intergenerational indirect exposure, we track family members of FSB migrants who never resided in an FSB county.

For this analysis, we drop states that ever had an FSB branch, and instead measure county-level exposure to migrants from FSB counties. We measure relative exposure to the FSB by dividing the number of FSB migrants who ever lived in a FSB county by the total Black population, total Southern Black migrant population, total Southern Black Urban migrant population, and total Black out-of-state migrant population. Although these variables capture different measures of FSB exposure, an increase in these measures is associated with an increase in the recipient county's exposure to the FSB. We calculate our dependent variables, as described above, using this linked-subset of the complete-county census data.

Lastly, we test the role of social networks and community leaders in spreading information about the FSB to unexposed Black communities. Specifically, we classify individuals as plausible social and leadership connections through which information spreads. To facilitate this analysis, we assign individuals as a social or leadership connection using occupations as recorded in the census. We classify individuals as social connections if they work as social workers, boot blacks, bar tenders, barbers, or non-clergy religious, and as leadership connections if they work as clergy, authors, journalists, lawyers, public administrators, and teachers. Individuals in these occupations engaged with a large number of individuals every day. Accordingly, we expect FSB-exposed individuals in these occupations to disseminate negative information about the FSB to their communities, thereby horizontally transmitting distrust in the banking system.

With these data in hand, we employ a TWFE estimator to estimate the effects of migrants from FSB counties on insurance holdings. We estimate the following equation:

$$AgentsPerHH_{ct} = \alpha + \beta FSBMig_{ct} + \gamma_s + \lambda_t + \epsilon \tag{2}$$

Where $AgentsPerHH$ is agents per 1,000 households in county c and year t, and $FSBMig$ is our measure of county-level exposure to FSB migrants. Our baseline measure of $FSBMig$ is the fraction of a county's Black population that migrated from an FSB county. We control for state and year fixed effects, and in some specifications further control for white, Black, and southern population growth.

Our sample is restricted to states that never contained an FSB branch such that we measure insurance holdings in destination counties of the Great Migration. We further restrict our sample to the years after the FSB's 1874 failure such that all FSB migrants are exposed to the Bank's failure. This choice is also driven in part by the extreme rarity of

Black migration from the South in the period prior to the FSB failure. A causal effect of FSB migrants on insurance holdings is identified if a migrant's choice of destination counties is uncorrelated with the destination's pre-existing preferences for insurance holdings.

Unless otherwise specified, we use the empirical approach above throughout our migration analysis. However, to demonstrate the robustness of our main migration results, we also generate migration results from an instrumental variables approach that uses a chain migration shift-share to predict the extent of Black FSB migrant presence in a particular destination county-year. Our approach follows that used in Derenoncourt (2022) and Bazzi *et al.* (2023), and allows us to account for concerns around potential endogeneity in FSB migrant destinations.

To implement this approach, we construct a shift-share chain-migration measure as follows. For each year between 1900 and 1940, we calculate shifts based on the total number of Black FSB migrants in the index year minus the total number of Black FSB migrants in 1880, the first post-FSB-collapse year in which data are available (note that 1890 Census microdata are unavailable, hence our choice to define migrant shifts as beginning in 1900). Shares are calculated based on the year 1870 (the first Census year prior to the bank's failure), and include FSB-origin people of all races (since in the pre-failure and especially pre-Emancipation period, there were vanishingly few Black FSB-origin migrants).[34] Specifically, shares are defined as the number of ever-FSB individuals living in a particular destination county in 1870 divided by the sum of all ever-FSB individuals living in such counties in 1870. As throughout our migration analysis, destination counties are limited to states that never had an FSB branch. The shift and share measures are then multiplied, and, as customary in the chain migration literature, we normalize this measure by the number of Southern-origin Black migrants in the destination county in 1880. This shift-share measure, which effectively uses the pre-FSB-failure destination choices of FSB-origin migrants to allocate post-FSB-failure migrant flows, then serves as an instrument for actual Black FSB migrant locations. The sample in the IV analysis is restricted to non-FSB states, and includes data from 1900-1940 (a time-span that allows us to capture the earliest-measurable post-FSB-failure migration flows).

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[34]While we might think that Black FSB migrants might have had different destination choices than non-Black migrants, we assume that the primary determinants of destinations—chief among them distance and ease of transport—were likely very similar across races.

D.3.2 Additional Migration Results

Table 24: IV Results: Impact of Migrants' Own FSB Exposure

DV:	Agents Per 1,000 HH (1)	Share Black (2)	Black Agents Per 1,000 Black HH (3)
FSB Exposure (per Southern Black Pop)	12.59***	2.393**	7.753***
	(3.408)	(1.170)	(2.858)
Observations	4,145	4,145	4,145
R-squared	-0.183	-0.179	-0.027
Fixed Effects	State, Year	State, Year	State, Year
Cluster	County	County	County
Sample	Non-South	Non-South	Non-South
Effective F-Stat	15.163	15.163	15.163
UnderID P-Value	0.003	0.003	0.003
Weak IV Robust CS	[6.854-21.697]	[0.655-5.983]	[2.945-15.956]

Notes: The dependent variable in Column 1 is *AgentsPerHH*, in Column 2 is *ShareBlack*, and in Column 3 is *BlackAgentsPerBlackHH*. The variable *FSBExposure(perSouthernBlackPop)* measures the number of post-1870 Black migrants from the FSB counties (per our main analytic sample) living in a particular destination county in a given year, as a share of the total destination-county Black population who are post-1870 Black migrants from the South in that year. We instrument for this variable with a shift-share measure of chain migration, where the shares are based on all-race 1870 migration patterns from FSB counties (specifically the share of all by-1870 FSB-origin migrants outside the South living in a particular destination county in 1870), where the shifts capture the total Black FSB-origin migration between 1880 and the terminal year, and where the shift-share measure is normalized by the Black Southern-origin population in the destination county in 1880. All specifications are restricted to states without an FSB branch and to the years 1900-1940. That is, relative to the main migration analysis, 1880 is omitted from the post-treatment period so as to allow for the calculation of migration shifts. To aid in interpreting effect sizes, the mean of "FSB Exposure (per Southern Black Pop)" over the period 1900-1940 is 0.035. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

Table 25: Migration IV First-Stage Results

DV:	FSB Exposure (per Southern Black Pop)
	(1)
FSB Chain Migration Shift-Share	0.00850***
	(0.00218)
Observations	4,145
R-squared	0.074
Fixed Effects	State, Year
Cluster	County
Sample	Non-South

Notes: The dependent variable in Column 1 is $FSBExposure(perSouthernBlackPop)$, which measures the number of post-1870 Black migrants from the FSB counties (per our main analytic sample) living in a particular destination county in a given year, as a share of the total destination-county Black population who are post-1870 Black migrants from the South in that year. The variable $FSBChainMigrationShift - Share$ is a shift-share measure of chain migration, where the shares are based on all-race 1870 migration patterns from FSB counties (specifically the share of all by-1870 FSB-origin migrants outside the South living in a particular destination county in 1870), where the shifts capture the total Black FSB-origin migration between 1880 and the terminal year, and where the shift-share measure is normalized by the Black Southern-origin population in the destination county in 1880. The specification is restricted to states without an FSB branch and to the years 1900-1940. That is, relative to the main migration analysis, 1880 is omitted from the post-treatment period so as to allow for the calculation of migration shifts. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

Table 26: Impact of Migrants' Own FSB Exposure on Race-Specific Demand

DV:	Black Agents per 1,000 Black HH		Share of Insurance Agents Black	
	(1)	(2)	(3)	(4)
FSB Exposure (per Southern Black Pop)	0.214*	0.260**	0.0639*	0.0414
	(0.111)	(0.107)	(0.0357)	(0.0279)
Observations	8,655	4,475	8,655	4,475
R-squared	0.003	0.032	0.006	0.028
Fixed Effects	State, Year	State, Year	State, Year	State, Year
Pop Growth Controls	Yes	Yes	Yes	Yes
Cluster	County	County	County	County
Sample	Non-South	Urban N-S	Non-South	Urban N-S

Notes: Each column is a separate regression with the dependent variable listed in the column header. The variable $FSBExposure(perSouthernBlackPop)$ measures the number of post-1870 Black migrants from the FSB counties (per our main analytic sample) living in a particular destination county in a given year, as a share of the total destination-county Black population who are post-1870 Black migrants from the South in that year. All specifications control for Black, white, and Southern-origin population growth, and are restricted to states without an FSB branch and to post-treatment years. Columns 2 and 4 are further restricted to urban counties. To aid in interpreting effect sizes, the mean of "FSB Exposure (per Southern Black Pop)" over the period 1880-1940 is 0.0339. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

Table 27: Impact of Migrants: First-hand vs Place-based Exposure

| | DV: Insurance Agents Per 1,000 Households | | | |
	(1)	(2)		
FSB First-hand Exposure (per Southern Black Pop)	2.097***	1.997***		
	(0.420)	(0.404)		
FSB Place-based Exposure (per Southern Black Pop)	1.187***	1.200***		
	(0.321)	(0.323)		
Share of FSB Exposure First-hand			0.240	0.224
			(0.221)	(0.217)
FSB Exposure (per Southern Black Pop)			2.075***	2.036***
			(0.308)	(0.300)
Observations	8,655	8,655	8,655	8,655
R-squared	0.398	0.404	0.406	0.412
Fixed Effects	State, Year	State, Year	State, Year	State, Year
Pop Growth Controls	No	Yes	No	Yes
Cluster	County	County	County	County
Sample	Non-South	Non-South	Non-South	Non-South

Notes: Each column is a separate regression with the dependent variable $AgentsPerHH$. In Columns 1 and 2, the variable $FSBFirst-handExposure(perSouthernBlackPop)$ measures the number of Black migrants from the FSB counties (per our main analytic sample) who are living in a particular destination county in a given year and who were observed in FSB counties in either/both Census years bookending the FSB failure, i.e., 1870 and/or 1880, all as a share of the total destination-county Black population who are post-1870 Black migrants from the South in that year. $FSBPlace-basedExposure(perSouthernBlackPop)$ refers to Black migrants from FSB counties who were observed in an FSB county no earlier than 1900, with the denominator as for the first-hand exposure variable. In Columns 3 and 4, the variable $ShareofFSBexposureFirst-hand$ captures the share of all Black FSB-origin residents of a destination county who were found in an FSB county in 1870 and/or 1880. Meanwhile, the variable $FSBExposure(perSouthernBlackPop)$ measures the number of post-1870 Black migrants from the FSB counties (per our main analytic sample) living in a particular destination county in a given year, as a share of the total destination-county Black population who are post-1870 Black migrants from the South in that year. Columns 2 and 4 control for Black, white, and Southern-origin population growth. All specifications are restricted to states without an FSB branch and to post-treatment years. To aid in interpreting effect sizes, we provide the following means: FSB First-hand Exposure (per Southern Black Pop) Mean: 0.0132; FSB Place-based Exposure (per Southern Black Pop) Mean: 0.0072. Standard errors are robust and clustered by county. *** p<0.01, ** p<0.05, * p<0.1

E   Online Appendix: Discussion

E.1   Likely Consequences of the Change in Savings Behavior

How did the shift in Black savings into life insurance companies impact Black families financially? Answering this question is difficult because data on individual portfolios in this period does not exist. Rates of return on insurance relative to alternative investments like deposits in banks varied over time and the business cycle.[35] Portfolio decisions have complicated dynamic impacts depending upon how substitution and income channels influence consumption and savings decisions. These complications suggest that some families likely benefited, while some families likely lost. Financial winners and losers may have changed over time. Which families won and lost depended upon choices households made and how the results of early choices influenced later decisions. Despite these complications, historical

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[35]We know much less about average returns on bank deposits in the 19th century, but estimates in the 20th century suggest that bank deposits on average paid approximately 2-3% per year (Arthi *et al.*, 2024).

data illuminates the likely impacts of shifting savings towards insurance at the beginning of our study in the 1870s and at the end of our study in the 1940s.

Black households that shifted savings towards insurance at the beginning of our study likely benefited financially—not only because life insurance policies tended to have similar or better returns than bank deposits at the time, but also because early life insurance policies offered uniform pricing that failed to account for higher Black mortality risk (Arthi *et al.*, 2024).

Two types of insurance were popular in the 1870s and 1880s. The first was assessment insurance issued by corporations and fraternal societies. Insurance of this type became increasingly popular at that time. Assessment insurance had low costs and high returns for the first generation of individuals who invested in the plan. Later generations, however, had low returns or experienced substantial losses on their investments since they paid substantial sums into their insurance organizations, but in the end received no money in return. This explains why the popularity of assessment insurance waned in the early twentieth century and the amount of new assessment policies dropped near zero by the 1920s (Stalson, 1942; Hedges, 1956). The first generation of Black policyholders who invested in assessment insurance following the FSB's failure, therefore, probably benefited financially from this shift, although generations who followed in their footsteps may have been worse off. The amount each household benefited would depend upon the assessment plan they purchased and what the household did with the funds received after the insured's demise.

The second type of insurance was issued by legal reserve life insurance companies. These ordinary and industrial life policies accumulated substantial equity and had high returns for Black households in the 1870s and 1880s because the insurers that issued these plans at that time insured Black and White households at the same rates and on the same plans (Stalson, 1942). Insurers did not initially realize that mortality was substantially higher, and longevity was substantially lower, for Black middle-aged men than for their white contemporaries, the latter of whose mortality experience underlay the statistical tables that actuaries used to calculate insurance rates. After a decade or two, insurers accumulated enough first-hand data to discern Black mortality and craft business practices that segregated white and Black customers into different insurance plans. In that window of opportunity, Black households that purchased ordinary and industrial life policies likely reaped large returns (Abner III, 1962, pp. 28–30).

The windfall returns to early adopters of legal reserve and assessment insurance may have been substantial and would have offset much or all the funds that families lost in the FSB collapse. The longer-run consequences are harder to discern, because the benefits of

investing in insurance relative to potential substitutes diminished and varied tremendously over time and across individuals. Clarity of consequences returned at the end of our study in the 1930s. During the decade of the Great Depression, equity-accumulating life insurance was a great investment. Banks failed in large numbers, and depositors lost substantial sums. Values of bonds, stocks, and real estate plummeted. The Dow Jones Industrial Average, for example, lost nearly ninety percent of its value from 1929 to 1932 and did not return to its pre-Depression peak until 1954 (Richardson *et al.*, 2013). Large life insurers, however, remained in business and paid policies without interruption. Rates of return for ordinary life policies were 3.5% in nominal terms (Jaqua, 1951; Stalson, 1942). So, $1,000 invested in an ordinary insurance policy in the summer of 1929 was worth $1,108.72 in the summer of 1932, while $1,000 invested in Dow stocks dropped in value to $110 in that same span of time. The end of the Depression in 1940 was a high point for the insurance industry. Savings via legal reserve life insurance policies as a fraction of household financial wealth peaked in that year (Ezekiel, 1937; Geren, 1943; Goldsmith, 1955; Life Insurance Association of America, 1962). At that point, it is likely that any family that had shifted savings towards equity-accumulating life insurance polices due to the FSB's failure was better off financially than families that missed the rising insurance tide.

While our study ends in the year 1940 due to data availability and for methodological reasons, we would be remiss not to foreshadow the fate of insurance-holders afterwards. The economic catastrophe that made life insurance an exceptional investment in the 1940s inspired legal, institutional, and economic reforms that favored other methods of accumulating wealth and rapidly eroded the value all long-term investments (such as life insurance policies) with fixed nominal returns. Among these changes include the pursuit of inflationary monetary policy from the mid-century onward; and the advent of OASDI/Social Security in the mid-1930s, which nationalized (and indexed to inflation) the sort of old-age savings that life insurance policies had previously facilitated, all while initially excluding from coverage the occupational categories employing most Black Americans. Accordingly, the positive consequences of the shift towards life insurance likely faded fast. Estimating the impact of post-war inflation on household savings—particularly the impact on households that saved in different ways, and particularly where these portfolio-choice differences were highly racialized—remains a subject for future research.

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