

Tenancy and African American Marriage in the Postbellum South

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Abstract The pervasiveness of tenancy in the postbellum South had countervailing effects on marriage between African Americans. Tenancy placed severe constraints on African American women’s ability to find independent agricultural work. Freedwomen confronted not only planters’ reluctance to contract directly with women but also whites’ refusal to sell land to African Americans. Marriage consequently became one of African American women’s few viable routes into the agricultural labor market. We find that the more counties relied on tenant farming, the more common was marriage among their youngest and oldest African American residents. However, many freedwomen resented their subordinate status within tenant marriages. Thus, we find that tenancy contributed to union dissolution as well as union formation among freedpeople. Microdata tracing individuals’ marital transitions are consistent with these county-level results.

Keywords Marriage · Divorce · Racial inequality · Economic history · Economic institutions

Introduction

Two perspectives dominate the social scientific literature on the African American family in the postbellum South. The first—most commonly associated with the work of Frazier (1968), Moynihan (1965), and Patterson (1998)—holds that African Americans retained familial norms adapted to the experience of enslavement long after

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emancipation. This perspective connects features of African American family life during slavery, such as the legal nonrecognition of slave marriages or the forcible separation of romantic partners, to African American family instability after the Civil War.

The second perspective instead highlights how the economic institutions that replaced slavery promoted marriage among young African Americans in the postbellum South. Focusing on the economic circumstances that African Americans faced after abolition, scholars working in this tradition have shown how tenant farming encouraged early marriage between freedpeople (Landale and Tolnay 1991; Tolnay 1984, 1999). Because few whites were willing to sell land to former slaves, African Americans' ability to work in agriculture depended on the bargains that they could strike with white landlords, who preferred to contract with male-headed households. This created economic incentives for freedpeople to marry at early ages.

These two perspectives make seemingly contradictory predictions about African Americans' marital patterns in the postbellum period. In this article, we reconcile them. We show how the same economic institutions that encouraged freedpeople to marry early also increased their likelihood of divorce. Early marriage enabled rural freedwomen to enter the agricultural labor force as tenant farmers. However, many African American women resented their subordinate status within tenant marriages. Thus tenancy contributed to union dissolution as well as union formation among freedpeople.

Our analysis makes two primary contributions. First, using the earliest available census data on marriage between freedpeople, we extend the findings of Tolnay (1984) and Landale and Tolnay (1991) to 1880, showing that counties' reliance on tenancy encouraged marriage among the youngest freedpeople. These results do not hold for whites, who, unlike African Americans, often delayed marriage until they could acquire land. Second, we establish that divorce was more common among African Americans of all ages in tenancy-dominated counties. Previous research has been unable to measure so rare an event as divorce in the postbellum South. The complete 1880 census enables us to present county-level estimates of this measure of marital instability for the first time.

In the following section, we describe the transition from slavery to family-based wage contracts, and subsequently to tenancy. Next, we discuss tenancy's implications for African Americans' marital patterns. We then describe our data, measures, and methods. After presenting the results of our analysis of the short-run effects of tenancy on marriage and divorce among African Americans in 1880, we conclude with a discussion of future prospects for assessing its long-run impact.

From Slavery to Tenancy

At the close of the Civil War, southern states were crippled and debt-ridden, left with damaged transportation infrastructure and severe labor shortages. In their efforts to rebuild the agricultural economy on a foundation of formally free labor, planters experimented simultaneously with several labor systems: gang labor, squad labor, and family labor, all paid in wages. Gangs and squads were direct relics of slavery. As they had before emancipation, planters favored dividing their workforce into units

devoted to specialized tasks coordinated by a central overseer (Jaynes 1986:166; Ransom and Sutch 2001:56–57). However, gang and squad labor had two important drawbacks. First, “the performance of labor had to be monitored, and this was costly because the workers were usually widely dispersed on the plantation” (Shlomowitz 1984:589). Second, African Americans resented how closely working in gangs and squads approximated their experience working as slaves. “Freedpeople believed,” according to Frankel (1999:76), “that working in families rather than in gangs led to less white supervision and enabled them to determine their own priorities, which gave them more control over their labor.”

Family-labor contracts enabled planters to solve the monitoring problem while acceding to freedpeople’s demand not to work in gangs or squads. Planters divided plantations into smaller farms and assigned the task of monitoring labor to contract signatories, the vast majority of whom were African American husbands. Contracts often specified how husbands were to control their wives and children. By dictating “personal conduct and household affairs,” planters could govern former slaves’ labor and comportment through the surrogate authority of African American household heads (Stanley 1998:42). African American men were “conscripted into a role once reserved for overseers and plantation agents”—regulating the labor of the kin for whom they had signed (O’Donovan 2007:193).

As planters came to recognize the economic benefits of using the patriarchal family’s authority structure to oversee their labor force, they increasingly refused to sign contracts with individuals—especially single women (Bercaw 2003:123). Although the exact extent of family-labor contracts throughout the South is unknown, evidence from selected counties suggests that they grew increasingly prevalent in the first few years after emancipation. Using data from six counties in the Yazoo-Mississippi Delta, for example, Bercaw (2003:125) documented a doubling—from 25 % to 53 %—in the percentage of freedpeople contracting as nuclear families between 1865 and 1866. Ruef (2012:979) showed that among all labor contracts collected by Freedmen’s Bureau offices in Washington, DC and Alexandria, VA between August 1865 and March 1867, only 18 % were signed by women. Planters’ postbellum experiments with wage-based family-labor contracts were short-lived. However, their use of the family to organize agricultural production set a precedent that “would never waver, regardless of labor arrangement” (Bercaw 2003:124).

By 1880, wage contracts for gang-, squad-, and family-based labor had been supplanted by three alternative work arrangements: cash tenancy, share tenancy, and sharecropping.¹ Cash tenants paid landlords an annual rent for access to land and retained any remaining profits (Tolnay 1999:9). Share tenants (who rented land) and sharecroppers (who rented equipment and animals as well) were paid in portions of their yield. In the absence of landownership, freedpeople preferred tenancy because, like family-based wage labor, it offered them more autonomy than gang- and squad-based labor (Bercaw 2003:135; Foner 1988:104; Hahn 1983:154; Loring and Atkinson 1869:32). Planters accepted tenancy because, like earlier forms of family-based labor, it delegated the task of monitoring workers to an overseer whose authority derived from kinship (Mandle 1992:38). Under tenancy, freedmen’s obligations to control the labor of their wives and children again were “often contractually specified” (Jaynes 1986:185). In contracting

¹ Throughout the article, we refer to all three arrangements as “tenancy.”

with male-headed households, “landowners recognized the usefulness of the male sharecropper’s patriarchal authority in putting women and children to work in the fields” (Mann 1990:141).

Tenancy and Union Formation

The transition to tenancy severely curtailed freedwomen’s ability to find independent agricultural work. Whites’ resistance to selling land to freedpeople meant that African Americans seeking to work in agriculture had to rent from white landowners, who avoided contracting directly with women. In an agricultural economy that left them “depressingly few means of survival that did not involve ex-slaveholders’ plantations,” marriage became one of African American women’s few viable routes into the labor market (O’Donovan 2007:186; see also Ruef 2012:981). Tenancy consequently shaped marriage patterns in the postbellum South, although it did so differently for different racial and age—but not gender—subgroups.

Although freedwomen’s exclusion from contracting and landowning gave them special incentives to marry, the effect of tenancy on marriage should not have varied by gender because men’s and women’s marriage decisions were interdependent. Freedwomen entering marriages with economic security in mind increased the prevalence of marriage among freedmen as well.

In contrast to its uniform effects on men and women, tenancy had different effects on African Americans and whites. Unlike most African Americans, whites who worked as tenant farmers could procure land after they had saved sufficient funds (Landale and Tolnay 1991; Tolnay 1984). Had rural freedwomen been offered land or the opportunity to purchase it, they might have produced goods independently, as they had in the plantation belt during the Civil War (Bercaw 2003:125). However, whites associated freedpeople’s acquisition of land with freedom, equality, and economic competition. Whites, fearful that African Americans would become economic or status equals, strenuously resisted African Americans’ efforts to acquire land, imposing informal sanctions against selling land to freedpeople and sometimes resorting to violence (Hayden et al. 2013:874–893; Oubre 1978:196; Ransom and Sutch 2001:86–87). White tenants often postponed marriage while they worked to accumulate sufficient savings to buy land, but African Americans had few such opportunities (Hagood 1939:35; Landale and Tolnay 1991:37). Thus, they had little reason to delay marriage.

Legal restrictions on cohabitation among freedpeople also meant that African Americans had a stronger incentive than whites to formalize their unions in law. Many state marriage laws pertaining to African Americans in the South considered cohabiting couples to be married and required these couples to legally register their union (Cott 2000:91; Edwards 1997:32; Franke 1999:277; Frankel 1999:82; O’Donovan 2007:194; Stanley 1998:44–46). Some imposed criminal sanctions if couples failed to register. Moreover, the fact that legislators reminded freedpeople contemplating separation that they were legally married and “could not marry without a divorce” helped to ensure that freedpeople’s separations would be legally recognized as well (Bercaw 2003:172).

Finally, tenancy’s effect on marriage varied with age. Marriage was a nearly ubiquitous life-course event in the postbellum South, and one that was especially

prized by the former slaves to whom it had been long denied (Gutman 1976; Hunter 1997:38; Stanley 1998:44). Given marriage's omnipresence, we do not expect tenancy to have affected whether individuals ever married over the course of their lives. Instead, economic considerations should have shaped the timing and duration of marital unions, which had multiple noneconomic motivations, influencing only those age groups on the verge of entering or exiting marriage.

Young freedpeople were most affected by African American women's shortage of options for finding agricultural work in high-tenancy counties. Single freedwomen seeking to enter the labor market faced a choice between marriage and migration to areas with nonagricultural economic opportunities. This predicament increased their likelihood of marrying early in three ways. First, marrying early improved freedwomen's chances of securing agricultural employment. Because marriage made it easier for freedwomen to find work in agriculture, women in counties where tenancy predominated might have married earlier than they would have if local economic opportunities had been more diverse. Second, women working in nonagricultural occupations in high-tenancy counties might have been influenced by local norms encouraging early marriage. Although they had no direct economic incentive to marry, these women might have adjusted their marriage decisions to meet the expectations of others in their local marriage market. In this case, tenancy would have both direct effects and spillover effects, encouraging all participants in a local marriage market to find a spouse at a young age. Finally, young women unwilling to accede to economic pressure to marry might have left for a city and thereby induced a relationship between the pervasiveness of tenancy and the prevalence of marriage among the young freedwomen remaining in high-tenancy counties. Using microdata from the 1900, 1910, and 1940 U.S. Census, Tolnay (1984, 1999) and Landale and Tolnay (1991) found evidence consistent with these explanations. They documented a strong relationship between county-level tenancy rates and early marriage among African Americans.

Tenancy might have affected the prevalence of marriage among the oldest freedwomen as well. As Jones (1985:108–109) noted, “[D]uring the latter part of the nineteenth century, when the natural selection process endemic to commercial crop agriculture weeded out ‘unfit’ households, it forced single mothers, widows, and unmarried daughters to look cityward.” Older widowed women found staying in agriculture especially untenable (Hunter 1997). “Even women accustomed to plowing with a team of oxen and knowledgeable about the intricacies of cotton cultivation could find the process of bargaining with a white man for seed, supplies, and a sufficient amount of land to be an insurmountable barrier” (Jones 1985:92; see also Goldin 1977). Just as freedpeople “moved to plantations after they had formalized marriages,” so they “returned to town after losing a spouse” (Bercaw 2003:123). Thus, the prevalence of marriage among older freedwomen should also have been higher in counties where tenant farming reigned.

Tenancy and Union Dissolution

Because marriage was one of the few ways that African American women could obtain agricultural work, the prevalence of marital unions among young freedpeople should

have been higher in counties dominated by tenant farming. However, for two reasons, the economic incentives promoting early marriage in tenancy-dominated counties might also have contributed to marital instability among freedpeople. First, the simple fact that those who marry early are at risk of divorce for longer than those who marry late means that early marriages are more likely to end in divorce (Preston 1997:474). This demographic regularity applies no less to tenants in the postbellum South than it does to later generations in other regions of the United States. Second, freedwomen who entered marriages with economic concerns in mind were subject not only to the gender inequality codified in marriage laws affecting all women but also to the dependency relations enshrined in agricultural labor contracts. Many freedwomen objected to their subordinate status within such marriages (Foner 1988:88; Patterson 2000:214). Their resistance to dependency and domination in their marriages may have culminated in divorce. Formal marital dissolutions were sometimes initiated by freedwomen (Edwards 2007:391). Other times, they were filed by freedmen responding to their wives' decisions to exit the relationship without obtaining a legal divorce (Edwards 1997:57–59). Although divorce was rare in the postbellum South, the legal regulation of African American marriages gave freedpeople special incentives to officially register their separations (Bercaw 2003:172).

Freedwomen entering legal marriages after emancipation experienced for the first time the legally sanctioned gender inequality preserved in statutes governing married women. In most southern states, married women either could not own and control real and personal property or could not own and control their market earnings (Cott 2000:94; Geddes and Tennyson 2013:153). Agricultural labor contracts granting husbands exclusive rights to the fruits of their family's labor further "institutionalized coverture" (Cott 2000:93). Although the institution of marriage had long formalized inequality between white women and men, the transition for freedwomen was abrupt. Slavery, according to Foner (1988:87), "had imposed upon black men and women the rough 'equality' of powerlessness. With freedom came developments that strengthened patriarchy within the black family." Thus, as emancipation narrowed the equality gap between whites and African Americans, it widened the gap between African American women and men (Patterson 2000:214). Because freedwomen rapidly transitioned from being the literal servants of their slave masters to being the contractual servants of their husbands, they were uniquely positioned to perceive similarities in these two forms of subordination.

As historian Amy Dru Stanley (1998:33) has shown, free African American women were some of the nation's most vociferous champions of women's equality during the antebellum period: "among the antislavery vanguard it was black women who most unequivocally asserted a woman's right to herself. Some of them had directly known a slave master's dominion; most of them had never known dependence on a husband." The idea that "women were the maid-servants of men" was especially aversive to freedwomen who had never been subject to legal restrictions on the economic rights of married women (White 1985:118).

After abolition, men's dominion over women was formalized not only in marriage contracts but also in agricultural contracts requiring men to control the labor and conduct of their wives. Like their antebellum predecessors, married freedwomen "did not always consent to a husband's assuming the master's authority" (Stanley 1998:50). Some asked to receive separate payment for their work and demanded exemption from liability for their husbands' debts (Foner 1988:88). Others left their marriages (Edwards 2007:391). Because the gender inequality codified in the marriage contract was reinforced by agricultural labor contracts in counties dominated by tenant farming, divorce among freedpeople of all ages should have been more common there.

Tenancy might also have affected divorce for other reasons. For instance, the economic strain of tenant farming could have weakened the marriages of white as well as African American tenants. Yet, because white marriages were less heavily regulated than those of African Americans and because whites felt less economic pressure to marry early, we expect that tenancy had a comparatively smaller effect on divorce among whites.

Empirical Predictions

Emancipation "not only institutionalized the black family but also spawned tensions within it" (Foner 1988:88). Documenting the economic constraints that freedwomen faced in the postbellum South allows us to generate several predictions about the relationship between tenancy and marriage among African Americans and whites.

The pervasiveness of tenancy should have had the strongest effect on young African American women deciding whether to marry early. We therefore expect to observe a positive relationship between the percentage of farms worked by tenants at the county level and prevalence of marriage among the youngest freedpeople. The opposite relationship should obtain for young whites, who could delay marriage until they could purchase land (Landale and Tolnay 1991; Tolnay 1984). As older single freedwomen migrated from counties where tenancy was pervasive to counties where it was less so, they might have induced a positive relationship between tenancy and the prevalence of marriage among the oldest African Americans as well. Because marriage was an extremely common life-course event in the late nineteenth century, and one inspired by several noneconomic motivations, we expect to observe a positive relationship between tenancy and the share of the population ever married only at the youngest ages, when the share ever married is approximately equal to the share currently married.

Finally, because African American women in tenant marriages were subject to a type of legal gender inequality that they had not previously experienced, and because early marriage put them at a greater risk of divorce, we expect that they were more likely to leave their marriages than both white tenant women and African American women working outside of agriculture. If so, we should observe a positive relationship between tenancy and divorce among freedpeople, but not whites. In the remainder of this article, we examine whether census data on tenancy, marriage, and divorce are consistent with these predictions.

Data, Measures, and Methods

We study the relationship between a county's reliance on tenant farming and the prevalence of marriage and divorce among its residents.² We supplement our county-level analysis with an examination of individual transitions into marriage. To measure a county's reliance on tenancy, we calculate the percentage of its farms that were worked by tenants or sharecroppers.³ These data were collected for the U.S. Census Office 1880 *Report on the Productions of Agriculture* (U.S. Department of the Interior 1883: table 5), made available in digital format by the Minnesota Population Center (2011). We restrict our sample to southern states as defined by the census as well as Missouri, which had a considerable slave population.

We examine four dependent variables: (1) shares currently married with a spouse present in the household, (2) shares ever married, (3) shares currently divorced, and (4) shares currently divorced or married with a spouse absent. We focus on race- and age-specific shares, calculating the number of county residents of racial group r (African American or white) and age a (15–19, 20–29, 30–39, 40–49, and 50 or older) of a given marital status per 1,000 county residents of racial group r and age a . We calculate these shares using the complete microdata of the 1880 census (Ruggles et al. 2010). We prefer the more conservative measure of “currently married, spouse present” because of concerns that single African American women overreported marriage (Preston et al. 1992).⁴ Our measure reduces the likelihood that marriage shares were artificially inflated by single women claiming to be married to an absent spouse. We combine men and women in our analyses, but our results are substantively identical if we restrict the sample to women.

Because marital status was either self-reported or determined by census enumerators' observations of households, some unmarried but cohabiting individuals might have been recorded as married. In this case, the population counted as married would reflect a mixture of married and cohabiting individuals. Like Landale and Tolnay (1991:38), we propose that marriage and cohabitation should respond similarly to local economic incentives. Many southern state marriage laws, moreover, considered cohabiting freedpeople to be legally wed. Thus, the fact that it is impossible to confidently distinguish marriage from cohabitation in census data poses no problem for our analysis.

In addition to marriage shares, we examine divorce shares, shares divorced or married to an absent spouse, and shares ever married. Current marriage and divorce reflect the outcomes of several distinct status transitions, such as remarriage and widowhood. Current divorce, as previously discussed, also reflects early marriage to the extent that individuals marrying early spend more time at risk of divorce. Shares

² Throughout the article, we use the terms “prevalence” or “share” interchangeably to refer to current marriage or divorce status ratios (e.g., the number of individuals of the relevant population group currently divorced per 1,000 members of that group).

³ In results not reported here, we estimated the effects of different types of tenancy, such as renting in cash or shares. Because all of these types of tenancy had similar effects on marriage and divorce, we pool them in our main analyses. The unreported results, like the results of all unreported supplemental analyses, are available from the authors upon request.

⁴ In the 1880 microdata, the presence of a spouse in the household was imputed based on the household record.

ever married, in contrast, are purer measures of involvement in marriage over the life course, capturing all who were married, divorced, separated, or widowed as of the 1880 census. To capture union dissolution, we examine both shares currently divorced and shares currently divorced or married to an absent spouse. The latter measure may capture unions that dissolved but were not legally terminated. However, our predictions regarding this latter measure are uncertain. A missing spouse on a census schedule could indicate that a household head had been permanently abandoned by his or her spouse. Alternatively, it could simply reflect the fact that the spouse was elsewhere when the family was visited by a census enumerator. Finally, as mentioned earlier, it could reflect freedwomen's overreporting of marriage (Preston et al. 1992:12). Ambiguity in the meaning of the "married, spouse absent" category prevents us from making sharp predictions about the relationship between tenancy and the share of residents divorced or married to an absent spouse.

We conduct our analysis at the county level because information about whether an individual was a tenant farmer is not available in the 1880 census. In theory, it is possible that the ecological associations relating counties' involvement in tenancy to their marriage and divorce shares do not reflect the unobservable individual-level associations. This situation would arise if young African Americans who were not tenant farmers were more likely to marry in high-tenancy counties, but African American tenant farmers were not. In practice, it is highly unlikely that any observed tenancy-marriage or tenancy-divorce relationships were driven only by the marital decisions of nontenants, given the small number of African Americans employed outside of tenant farming in high-tenancy counties. However, it is possible that tenancy affected both tenants and nontenants. One benefit of using county-level data is that it enables us to capture possible spillover effects, wherein individuals who did not themselves enter tenant farming were nonetheless affected by tenancy's influence on the local marriage market.⁵ In supplemental individual-level analyses, we study how the probabilities of transitioning to marriage among African American and white men varied with the pervasiveness of tenant farming in their counties.

Our analysis includes both African Americans and whites. Studying whites has two benefits. First, comparing our results across racial groups enables us to more confidently assess whether any detected relationship between tenancy and African American marriage is driven by the historical evidence discussed earlier, rather than an omitted variable related to both a county's participation in tenant farming and its general promotion of marriage. For example,

⁵ In supplemental analyses, we examined tenancy-marriage and tenancy-divorce associations for those who worked in agriculture versus those who did not. Tenant status was not recorded in the 1880 census of population. The census classification of agricultural workers is therefore an imperfect proxy. We found that the tenancy-marriage and tenancy-divorce relationships were larger among African Americans working in agriculture than among African Americans not working in agriculture, although the differences were not generally statistically significant. The difference in tenancy's effect on white agricultural versus nonagricultural workers was substantially smaller than the difference for African Americans, indicating that the use of agricultural occupation as a proxy for tenant status may be noisier for whites than for African Americans.

residents of high-tenancy counties might have been more culturally conservative and thus morally inclined to impress marriage on the entire population, irrespective of race. Consequently, finding positive tenancy effects for whites would undermine our claim that the tenancy-marriage relationship was driven by constraints freedwomen faced in the postbellum agricultural economy. If our predictions are correct, we should observe a negative tenancy-marriage relationship for young whites and a positive tenancy-marriage relationship for young African Americans.

Second, comparing the tenancy-marriage and tenancy-divorce relationship across groups allows us to assess how tenant farming shaped racial differences in family structure. Racial gaps motivated prior research on how slavery affected African American marital stability. By formally comparing the race-specific effects, we can quantify how tenancy contributed to racially divergent marriage and divorce patterns in the postbellum South.

We argue that a county's reliance on tenant farming should have affected the prevalence of marriage and divorce among African Americans because tenancy created economic incentives encouraging freedwomen to marry earlier than they would have otherwise. Because any observed relationship between a county's reliance on tenant farming and its shares currently married, currently divorced, currently divorced or married with a spouse absent, or ever married could be due to county-level differences correlated with both farming practices and family choices, we condition our estimates on several county-level covariates. We write a county's (c) log share currently married (or, in separate analyses, currently divorced, divorced or married to an absent spouse, or ever married)⁶ among individuals of racial group r and age a as a function of the percentage of farms worked by tenants (*tenancy*),⁷ a vector of covariates (\mathbf{X}), and a vector of state (s) fixed effects:

$$y_{c,s,r,a} = \alpha + \beta \text{tenancy}_c + \gamma \mathbf{X}_{c,r} + \delta_s + \varepsilon_{c,s,r,a}. \quad (1)$$

Rather than include race main effects and interactions, we stratify the data and run the analyses separately for each racial group. $\mathbf{X}_{c,r}$ includes the ratio of females to males for each age group (ages 15–19, 20–29, 30–39, 40–49, and 50 and older) to adjust for differences in county marriage markets. It also includes population density, measured as the number of residents per square kilometer, because rural counties may have been both more likely to rely on tenant farming and more likely to foster norms promoting early marriage. These data are from the complete 1880 census.⁸ We exclude 30 counties with missing tenancy data (29 in Texas and 1 in Florida).

⁶ Although we run separate regressions for each outcome, we denote each y for simplicity. We add 0.01 before logging in order to include in our estimation counties where marriage or divorce shares were zero because of positive denominators but zero numerators. Our patterns of inference and results are not sensitive to this choice, although the exact magnitudes of our coefficient estimates vary across different treatments of zeros.

⁷ We find that the percentage of farms worked by tenants related linearly to the log of marriage and divorce shares. Nonlinear specifications produce substantively identical results.

⁸ Data on the area of 1880 counties come from the Minnesota Population Center's (2011) National Historical Geographic Information System.

Because we observe considerable spatial autocorrelation in the residuals when using standard maximum likelihood estimation, we fit Eq. (1) using maximum likelihood with a spatial simultaneous autoregressive error model.⁹ The errors of counties sharing borders, and thus connected through the matrix \mathbf{W} , correlate according to the model

$$\varepsilon = \lambda \mathbf{W}\varepsilon + \nu, \quad (2)$$

where ν represents the spatially independent errors (Anselin 1988). Estimation involves finding λ via a maximum likelihood optimization algorithm and then estimating the parameters of Eq. (1) $\{\alpha, \beta, \gamma, \delta\}$ by generalized least squares (Bivand 2002).

By including state fixed effects and county-level covariates, we attempt to compare counties that are similar in their observable characteristics (comparing, for example, age- and race-specific shares across counties within a state with comparable marriage markets) in order to isolate the effect of differences in the county's reliance on tenant labor. Our goal is to compare a county's observed African American marriage or divorce share to the counterfactual share that we would observe if we changed its reliance on tenancy but left all other exogenous characteristics fixed. We use cross-county and cross-race comparisons to approximate this counterfactual.

Finally, we conduct a supplementary analysis of individual-level data. This augments our county-level analysis in three ways. First, it allows us to avoid some ecological inference problems by examining individual-level choices. Second, it enables us to adjust our estimates for individual-level traits that could drive selection into marriage. Third, and perhaps most importantly, it allows us to observe changes in marital status over time. While the county-level analysis examines how tenancy shaped the current prevalence of marriage and divorce, the individual-level analysis reveals how a county's reliance on tenant labor related to residents' decisions to transition into marriage.¹⁰

To complete our supplemental, individual-level analysis, we use the Integrated Public Use Microdata Series (IPUMS) Linked Representative Samples. These data link individuals observed in the complete 1880 census with their observations in 1 % samples from the 1850 through the 1930 censuses. We use the 1870–1880 sample of men, observing whether these men transitioned from being unmarried to married over the 10-year period. The sample is representative of the African American and white populations present in the United States in both years. We include in our models only those men aged 18 and older in 1880 who were unmarried in 1870, focusing on those at risk of transitioning to marriage. Although the youngest men in our sample were at risk

⁹ We use a queen contiguity matrix, wherein a single shared boundary point meets the contiguity condition. Moran's I statistics for models following Eq. (1) estimated using standard maximum likelihood to predict African American and white age-standardized marriage shares are 12.3847 ($p < .0001$) and 20.6074 ($p < .0001$), indicating that the null hypothesis that the errors are independent is strongly rejected. When we adjust for spatial autocorrelation, these Moran's I statistics fall to -2.3077 ($p = .9895$) and -3.5836 ($p = .9998$), respectively. The corresponding Moran's I statistics for age-standardized shares ever married and age-standardized shares divorced without adjustment for spatial autocorrelation are 15.0539 and 8.2262 for African Americans and 23.0260 and 4.6167 for whites, respectively (all $p < .0001$). When we adjust for spatial autocorrelation, these I statistics fall to -2.2269 ($p = .9870$), -0.5930 ($p = .7234$), -4.9735 ($p = 1.000$), and -0.6214 ($p = .7328$), respectively, suggesting that the adjustment renders the errors appropriately independent.

¹⁰ Because divorce was such a rare event, the small sample in the linked census data prevents us from studying transitions from marriage to divorce.

of marriage for the least amount of time, we include them in our analysis because we expect that tenancy had an especially pronounced effect on early marriage. Analyses restricted to older men, albeit weaker in statistical power because of the decreased sample size, generate comparable results. We study men because women changed their surnames when they married and consequently could not be reliably linked across censuses if they changed marital status.

Three aspects of the IPUMS linkage procedure are important for understanding the accuracy and representativeness of the linked samples (for details, see Goeken et al. 2011; Vick and Huynh 2011). First, the procedure for determining links aimed to minimize the introduction of biases and errors due to false linkages. For example, although using information on household co-residents could have increased the number of links, it would have biased the sample toward nonmigrants and individuals in stable families. Consequently, the primary linking variables were restricted to birthplace, birth year, surname, and given name.¹¹ This stringent procedure resulted in a high degree of accuracy (Goeken et al. 2011) but a small number of links. Among males observed in the 1870 1 % sample, 12.2 %, 3.0 %, and 6.4 % of native-born whites, foreign-born whites, and African Americans, respectively, were linked to their 1880 census record (IPUMS-USA 2010).

Second, as these statistics illustrate, there is substantial variation in linkage rates by race and ethnicity. These differences are likely driven by lower age misreporting and name homogeneity among native-born whites (Goeken et al. 2011). However, there is no *a priori* reason to believe that differences in linkage rates differentially bias the tenancy-marriage relationship for whites and African Americans because having a common name or knowing one's exact age were unlikely to have influenced an individual's marriage prospects. Third, to adjust for linkage differences, we weight all observations in our analyses using estimates of the "linkable" population (individuals aged 10 or older in 1880, who could potentially have been observed in 1870). These weights help ensure that the results are generalizable to the target population of individuals present in the United States in 1870 and 1880. The use of 1880 data to generate the weights should also allay common concerns about the quality of the 1870 census. Problems with enumeration in 1870 will add noise to our data and attenuate our estimates. If we find significant results, this should indicate that the substantive signal is fairly strong.

We predict the probability of transitioning from unmarried to married between 1870 and 1880 using an approach similar to the approach used in our county-level analysis. We use the tenancy variable and the county covariates described earlier, along with several individual-level traits that could be associated with marriage. These include each individual man's age, age-squared, occupational status, and indicators for illiteracy, foreign birth, and farm residence. All individual traits were measured in 1870, before the transition to marriage. The first year for which county-level data on tenancy are available is 1880. Accordingly, all county-level traits and borders are measured in that year. As in the county-level analysis, we compare the relationship between marriage and tenancy for whites and African Americans. We cluster the standard errors at the county level to account for the fact that multiple individuals within the same county share county-level attributes.

¹¹ In addition, IPUMS excluded individuals with more than one possible link. For example, if the 1870 1 % sample included one John Smith born in Michigan in 1845 but the 1880 complete census recorded three John Smiths born in Michigan in 1845, this John Smith would be dropped from the sample.

Results

Table 1 reports parameter estimates from regressions predicting white and African American age-specific current marriage shares. The first three columns show the coefficients for whites, the second three columns show the coefficients for African Americans, and the final column shows the racial difference in the coefficients of the most parameterized model. Model 1 captures the simple bivariate relationship between the pervasiveness of tenancy and the prevalence of marriage among each race-age group. Model 2 includes county covariates, and Model 3 adds state fixed effects. The rows report the coefficients for different age groups. Whether examining the simple bivariate relationship, adjusting for county covariates, or adding state fixed effects, we consistently observe substantially sized positive coefficients describing the relationship between tenancy and the prevalence of marriage among the youngest African Americans. For the youngest African Americans, a 1 percentage point difference in the percentage of farms worked by tenants is associated with about a 2 % difference in current marriage shares ($\hat{\beta}$ is .0244, .0222, and .0177 in Models 1, 2, and 3, respectively).

Table 1 Predicting age-specific shares currently married, spouse present in 1880 (number per 1,000 age-specific population, logged), county-level data by race for Southern states: Census data

	White			Black			Racial Diff.
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	(W – B) Model 3
Age 15–19							
% Tenant Farmed	–.0050 (.0020)*	–.0055 (.0018)**	–.0044 (.0018)*	.0244 (.0055)***	.0222 (.0053)***	.0177 (.0052)***	–.0220 (.0055)***
Age 20–29							
% Tenant Farmed	.0001 (.0013)	.0002 (.0011)	.0006 (.0011)	.0052 (.0027)	.0054 (.0026)*	.0040 (.0026)	–.0034 (.0028)
Age 30–39							
% Tenant Farmed	–.0055 (.0009)***	–.0043 (.0008)***	–.0037 (.0008)***	–.0008 (.0014)	–.0009 (.0013)	–.0020 (.0014)	–.0017 (.0016)
Age 40–49							
% Tenant Farmed	–.0014 (.0007)*	–.0013 (.0006)*	–.0005 (.0006)	.0046 (.0016)**	.0036 (.0015)*	.0038 (.0016)*	–.0043 (.0017)*
Age 50+							
% Tenant Farmed	.0029 (.0014)*	.0013 (.0012)	.0027 (.0012)*	.0125 (.0034)***	.0125 (.0032)***	.0106 (.0033)**	–.0079 (.0035)*
County Covariates		Yes	Yes		Yes	Yes	Yes
State Fixed Effects			Yes			Yes	Yes

Notes: Standard errors, adjusted for spatial clustering with spatial autoregressive error, are shown in parentheses. County covariates are race-specific and include female-to-male population ratios for ages 15–19, 20–29, 30–39, 40–49, and 50+, plus population density. The intercept is also included and suppressed from the output. Sample size varies by age, as some age-by-race-by-county cells are empty. *N* range = (1,251, 1,256) for white shares and (1,168, 1,229) for black shares.

p* < .05; *p* < .01; ****p* < .001 (two-tailed tests)

This difference corresponds to demographically substantial variation in the prevalence of marriage among young African Americans. Model 1 predicts that the average share of African American 15- to 19-year-olds married with a spouse present was about 30.8 in counties in the lowest quartile of tenancy (30.8 per 1,000 African American county residents aged 15–19). In contrast, our estimates suggest that this share about triples, at about 94.0, in counties in the top quartile of tenancy. The predicted difference in the prevalence of marriage among young whites was much smaller, averaging about 92.9 for whites aged 15–19 living in counties in the lowest quartile of tenancy compared with an average of about 79.8 for those living in the highest quartile counties.

As expected, the tenancy-marriage relationship decays as we move up the age distribution, becoming positive and significant again only at ages 40–49 and 50 and older. These results are consistent with our prediction that tenancy's effect on marriage should have been concentrated among the youngest and oldest African Americans. The opposite relationship obtains for young whites, whose marriage shares are negatively related to the pervasiveness of tenancy in their county. This is consistent with our prediction—as well as previous evidence from Tolnay (1984) and Landale and Tolnay (1991)—that whites in high-tenancy counties delayed marriage until they could purchase land. The coefficients for African Americans are significantly larger than those for whites at the youngest and oldest ages.

Table 2 reports parameter estimates mirroring those in Table 1, but with divorce as the outcome. We observe that tenancy is positively related to the prevalence of divorce among African Americans of all ages. The coefficient magnitudes generally increase with age because the risk of divorce accumulates with the duration of marriage. The results for whites, by contrast, are never statistically distinguishable from zero. Differences in the size of the coefficients for the two racial groups are statistically significant at all ages, as shown in the final column of Table 2. Tenancy appears to have been substantially more destabilizing for African American marriages than white marriages. These results are consistent with our prediction that tenancy's effect on early marriage, in combination with African American women's resentment of their subordinate position within tenant marriages, resulted in a relatively high prevalence of divorce among African Americans in tenancy-dominated counties.

Figure 1 plots the coefficients predicting African American marriage and divorce shares from models conditioning on county covariates and state fixed effects, as reported in Model 3 in Tables 1 and 2. It also plots comparable coefficients from models predicting African American shares ever married. The figure highlights the age pattern in our results: tenancy is related to the prevalence of marriage among only the youngest and oldest African Americans, while it is related to the prevalence of divorce among African Americans of all ages. As expected, tenancy's effect on shares ever married grows smaller as we move up the age distribution: the only large effect occurs at the youngest ages, when shares currently married and shares ever married are approximately equal. These results show that tenancy affected the timing and duration of marriage but not the probability of ever marrying.

In Table 3, we report parameter estimates from regressions predicting age-specific shares currently divorced or married to an absent spouse in 1880. Our predictions about these results were more uncertain because the outcome could capture the permanent abandonment of a spouse; a spouse's temporary absence at the time of the census, perhaps due to work-related migration; or misreporting. As in our analysis of divorce

Table 2 Predicting age-specific shares currently divorced in 1880 (number per 1,000 age-specific population, logged), county-level data by race for Southern states: Census data

	White			Black			Racial Diff. (W - B)
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 3
Age 15–19							
% Tenant Farmed	-.0034 (.0044)	-.0036 (.0045)	-.0024 (.0043)	.0258 (.0043)***	.0245 (.0043)***	.0217 (.0043)***	-.0241 (.0061)***
Age 20–29							
% Tenant Farmed	-.0069 (.0047)	-.0079 (.0047)	-.0005 (.0043)	.0373 (.0063)***	.0369 (.0062)***	.0359 (.0061)***	-.0364 (.0074)***
Age 30–39							
% Tenant Farmed	-.0015 (.0047)	-.0017 (.0048)	.0041 (.0045)	.0295 (.0069)***	.0289 (.0068)***	.0270 (.0068)***	-.0230 (.0082)**
Age 40–49							
% Tenant Farmed	-.0076 (.0054)	-.0064 (.0055)	.0037 (.0052)	.0429 (.0068)***	.0419 (.0068)***	.0391 (.0068)***	-.0354 (.0086)***
Age 50+							
% Tenant Farmed	-.0089 (.0053)	-.0092 (.0053)	-.0020 (.0050)	.0497 (.0065)***	.0495 (.0064)***	.0481 (.0063)***	-.0501 (.0081)***
County Covariates		Yes	Yes		Yes	Yes	Yes
State Fixed Effects			Yes			Yes	Yes

Notes: Standard errors, adjusted for spatial clustering with spatial autoregressive error, are shown in parentheses. County covariates are race-specific and include female-to-male population ratios for ages 15–19, 20–29, 30–39, 40–49, and 50+, plus population density. The intercept is also included and suppressed from the output. Sample size varies by age, as some age-by-race-by-county cells are empty. *N* range = (1,251, 1,256) for white shares and (1,168, 1,229) for black shares.

p* < .05; *p* < .01; ****p* < .001 (two-tailed tests)

only, we find large and statistically significant associations between tenancy and the combined outcome of divorce or marriage to an absent spouse for African Americans of all ages, as well as large and statistically significant racial differences in the magnitude of the relationship between tenancy and union dissolution. Among whites, except at the youngest ages, we observe positive and statistically significant coefficients on tenancy when predicting age-specific shares divorced or married to an absent spouse but not when predicting age-specific shares divorced. This could indicate that whites in high-tenancy counties were more likely to experience union dissolution than whites in low-tenancy counties but that whites were less likely than African Americans to formalize their separations before the state. However, given the multiple possible meanings of the “married, spouse absent” measure, as well as possible racial variation in these meanings, we hesitate to place a strong substantive interpretation on these results. Across measures of union dissolution, we see clear evidence of stronger tenancy effects for African Americans than for whites.

Finally, we check the robustness of our county-level results using a supplemental analysis of individual-level data. Table 4 reports coefficients predicting the log odds of

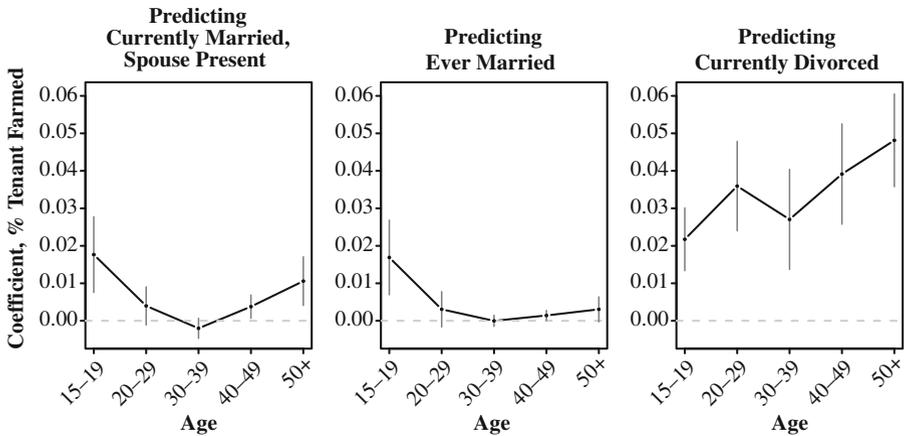


Fig. 1 Coefficient on percentage of farms in county sharecropped or tenant farmed by age. Predicting age-specific shares of population in various marital states. African Americans only, Model 3 (see tables for details; conditional on county covariates and state fixed effects). Point estimates with 95 % confidence intervals (standard errors adjusted for spatial clustering). Southern states. Census data

an individual resident entering marriage between 1870 and 1880 with the county-level pervasiveness of tenancy, first from a simple bivariate model and then from models controlling for individual-level characteristics and county-level attributes. Across all three models, a county's involvement in tenancy significantly and positively predicts transitions into marriage among African American men. Model 3, conditioning on all individual- and county-level covariates, demonstrates that for each 1 point increase in the percentage of county farms that were worked by tenants, we observe about a $(100 \times (e^{0.151} - 1)) = 1.5\%$ increase in the odds that an African American man married between 1870 and 1880. For white men, the coefficients are negative and not statistically distinguishable from zero, despite the fact that the sample of white men is about three times larger than the sample of African American men. The race-specific coefficients can also be distinguished from one another statistically, indicating that tenancy affected white and African American men differently.

Figure 2 depicts the relationship described in Model 3, relating the county-level pervasiveness of tenancy to an individual resident's probability of entering marriage between 1870 and 1880, holding all other covariates at their mean. We observe a positive and statistically significant relationship between tenancy and marriage transition probabilities for African Americans, reflected in the positive slope. For whites, in contrast, the slope is flat. The analysis of the individual-level data is broadly consistent with that of the county-level data. We replicate the strong positive relationship between a county's involvement in tenancy and African American marriage at the individual level, documenting an association between tenancy and changes in marital status over time.

Conclusion

Social scientists and historians have long argued that African Americans' comparatively high degree of marital instability is related to slavery and the economic institutions that succeeded it. Although racial disparities in family structure have increased in recent

Table 3 Predicting age-specific shares currently divorced or married with spouse absent in 1880 (number per 1,000 age-specific population, logged), county-level data by race for Southern states: Census data

	White			Black			Racial Diff. (W - B)
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	Model 3
Age 15–19							
% Tenant Farmed	.0037 (.0040)	.0028 (.0040)	.0065 (.0039)	.0453 (.0065)***	.0446 (.0064)***	.0385 (.0064)***	-.0320 (.0075)***
Age 20–29							
% Tenant Farmed	.0095 (.0018)***	.0084 (.0017)***	.0101 (.0017)***	.0312 (.0054)***	.0310 (.0053)***	.0291 (.0053)***	-.0190 (.0056)***
Age 30–39							
% Tenant Farmed	.0058 (.0018)**	.0055 (.0019)**	.0056 (.0019)**	.0292 (.0057)***	.0309 (.0056)***	.0270 (.0056)***	-.0214 (.0060)***
Age 40–49							
% Tenant Farmed	.0025 (.0021)	.0041 (.0020)*	.0054 (.0021)*	.0290 (.0064)***	.0303 (.0062)***	.0263 (.0063)***	-.0209 (.0066)**
Age 50+							
% Tenant Farmed	.0032 (.0018)	.0070 (.0017)***	.0067 (.0018)***	.0445 (.0064)***	.0449 (.0063)***	.0425 (.0063)***	-.0358 (.0065)***
County Covariates		Yes	Yes		Yes	Yes	Yes
State Fixed Effects			Yes			Yes	Yes

Notes: Standard errors, adjusted for spatial clustering with spatial autoregressive error, are shown in parentheses. County covariates are race-specific and include female-to-male population ratios for ages 15–19, 20–29, 30–39, 40–49, and 50+, plus population density. The intercept is also included and suppressed from the output. Sample size varies by age, as some age-by-race-by-county cells are empty. *N* range = (1,251, 1,256) for white shares and (1,168, 1,229) for black shares.

p* < .05; *p* < .01; ****p* < .001 (two-tailed tests)

decades (McLanahan and Percheski 2008), they have existed for more than a century (Morgan et al. 1993; Ruggles 1994). In this article, we examine how the organization of the agricultural economy shaped union formation and dissolution among freedmen and freedwomen in the wake of emancipation. Using data from the complete-count 1880 U.S. Census as well as Linked Representative Samples from the 1870–1880 censuses, we provide new evidence about the relationships between tenancy and both marriage and divorce—the latter of which was sufficiently rare that previous studies using smaller samples were unable to measure it.

Immediately following the Civil War, planters experimented with several methods of organizing their labor force. Freedmen and freedwomen preferred family-based labor because it offered them a degree of workplace autonomy relative to gang- and squad-based labor. Planters came to favor family-labor contracts because they shifted the cost of monitoring labor onto male heads of household. The transition from gang-, squad-, and family-based wage labor to tenancy solidified the place of the family in the organization of the postbellum agricultural economy. Landlords excluded African Americans from landownership and avoided contracting directly with women. In

Table 4 Logistic regression coefficients predicting individual-level transitions from unmarried to married between 1870 and 1880 using county-level data by race. Southern states, men unmarried in 1870 and aged 18 and older in 1880: Census data

	White			Black			Racial Diff ^a		
	Model 1	Model 2	Model 3	Model 1	Model 2	Model 3	(W - B) Model 1	(W - B) Model 2	(W - B) Model 3
% Tenant Farmed	-.0033 (.0037)	-.0061 (.0043)	-.0055 (.0036)	.0097 (.0046)*	.0156 (.0050)**	.0151 (.0050)**	-.0130 (.0056)*	-.0217 (.0063)***	-.0206 (.0068)**
Individual Covariates	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
County Covariates			Yes			Yes			Yes
Pseudo-R ²	2,336	2,336	2,336	773	773	773	.0108	.2106	.2119
N Individuals	844	844	844	427	427	427	3,109	3,109	3,109
N Counties							955	955	955

Notes: Standard errors, clustered by county, are shown in parentheses. County covariates are race-specific and include female-to-male population ratios for ages 15–19, 20–29, 30–39, 40–49, and 50+, plus population density. Individual-level covariates include 1870 age, age squared, and Duncan SEI, as well as dummy variables for illiteracy, farm residence, and foreign-born. The intercept is also included and suppressed from the output. The pseudo-R² is reported only in the racial difference columns because the black and white coefficients as well as their difference are jointly estimated in models with interactions.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests)

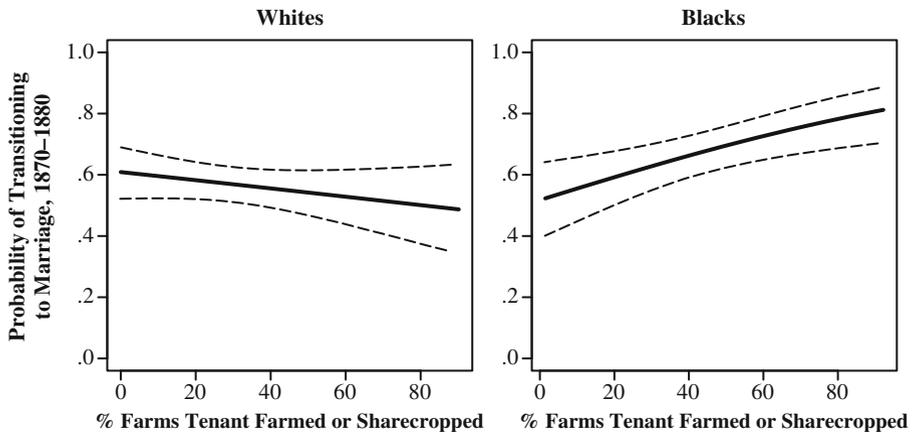


Fig. 2 Predicted probability of transitioning to marriage, 1870–1880, among those at risk for marriage (single in 1870, age 18+ in 1880). Predictions for white and African American men are shown separately. Predicted probabilities from Table 4, Model 3, with all covariates set to their means. Solid lines represent point estimates, and dashed lines represent 95 % confidence intervals. Southern states. Linked Representative Samples, Census data

counties heavily reliant on tenant labor, this created incentives for young African Americans, but not for young whites, to marry. It also may have affected the marriage choices of freedpeople not involved in agriculture, who had to adjust their decisions to meet the expectations of others in their local marriage market.

The economic incentives established by planters' use of family-based labor led us to predict that both the prevalence of marriage among young African Americans and the prevalence of divorce among African Americans of all ages would be higher in counties that relied heavily on tenant labor. Our results support these predictions. As early as 1880, early marriage and divorce among freedpeople prevailed in counties where agricultural production centered on tenancy. The same results for whites reveal a negative relationship between tenancy and early marriage and no statistically significant relationship between tenancy and divorce. African American men and women adjusted their family structures to suit the changing nature of the local agricultural economy. However, these adjustments ultimately contributed to marital instability among freedpeople.

Future research should explore the long-run consequences of these short-run effects. Marriage established a relationship between husband and wife similar to that between master and servant (Pettit 2014). Some scholars claim that in the transition from the literal servants of their slave masters to the contractual servants of their husbands, freedwomen developed a durable suspicion of the institution of marriage. In interviews conducted with African American women in the cotton regions of Texas between 1928 and 1930, for example, Allen (1933:175–176) observed the “cynicism of the younger women toward men and marriage.” Many, she found, “are learning from their mothers' experiences and are developing interesting attitudes of independence. They do not do hired labor unless they are able to keep their own money.” Tense gender relations perpetuated by tenant farming may have altered freedwomen's beliefs about marriage even after tenancy's demise (Patterson 2000:52).

Our data cannot speak to these claims. Although we document that divorce was more common among freedpeople where tenant labor was more pervasive in 1880, sufficiently large data sets linking the marital status of African American parents in 1880 to those of their children have yet to be constructed. However, they may soon become available (Goeken et al. 2011). The release of these data would enable scholars to compare the long-run marriage outcomes of African Americans born to parents in regions with a greater or lesser reliance on tenant labor. To understand the role of historical legacies in family change and continuity, it is important to examine long-term trends for both whites and African Americans rather than discrete, disconnected points in time for a single racial group (Goldscheider and Bures 2003).

In this article, we offer new evidence connecting African Americans' experience under tenancy to their family formation and dissolution patterns in the postbellum South. We find that tenancy increased marriage among young African Americans and increased divorce for African Americans of all ages. We show that research documenting early marriage among African Americans in the postbellum South is empirically compatible with research highlighting how slavery and its successor institutions promoted marital instability. Future work should continue to map the relationship between tenancy and marriage in order to enrich our understanding of how the effects of historical economic institutions change or persist over time.

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