

## “To Set Devils Free”: Manumission in Nineteenth-Century Virginia

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*Abstract:* At what age were slaves manumitted? What factors influenced the age at which slaves were manumitted? Using previously unexploited data set this paper explores the ages and conditions under which slaves were manumitted. OLS estimates reveal that mixed-race slaves, as well as those manumitted by female slave owners and those manumitted in groups or with family members, were manumitted at earlier ages. Proportional hazards estimates suggest that these same groups were manumitted at higher rates. The results also reveal a markedly diminishing risk of manumission after Nat Turner’s rebellion in 1831. Slave owners apparently balanced two competing forces: the use of selective manumission as a reward mechanism to elicit effort and good behavior among slaves, and a social norm increasingly opposed to liberal manumission as fears over the increased size and radicalization of the free black community grew with increases in abolitionist fervor.

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“Slaves are devils, and to make them otherwise  
than slaves will be to set devils free.”

-- Landon Carter<sup>1</sup>

## INTRODUCTION

More than two centuries after he wrote “that all men are created equal, that they are endowed by their Creator with certain unalienable Rights, that among these are Life, Liberty and the pursuit of Happiness,” Thomas Jefferson’s words still strike a deep chord in the American psyche. That Jefferson could personally reconcile the contradiction between this self-evident truth and slave holding has confounded generations of historians and biographers.<sup>2</sup> The contradiction is probably best resolved by recognizing that whatever else Jefferson was – lawyer, statesman, political philosopher, inventor and planter -- he was a politician, one who recognized early that advocating emancipation would have alienated his base and precluded him from accomplishing anything of consequence.

Although prominent contemporaries, such as Robert Carter III of Nomini Hall, Richard Randolph, related to Jefferson through marriage, and George Washington, manumitted more than 1,000 slaves, Jefferson liberated just eight of the approximately two hundred slaves that worked his plantation during his lifetime. Jefferson was not alone in championing white liberty and black slavery, and men like Carter, Randolph and Washington were the anomalies.<sup>3</sup> Most of Jefferson’s peers feared the consequences of wholesale emancipation, not just for them personally, but for all of their kind (Babcock 1974). If a small planter liberated a slave or two, few noticed. If Jefferson had liberated hundreds or even just dozens of slaves, he would have implicitly endorsed a political agenda he did not support.

Although debates over how best to interpret the founder’s predilections toward manumission and emancipation continue, scholarly interest in the mechanics of manumission has blossomed after a long silence. Babcock (1974) and Kotlikoff and Rupert

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<sup>1</sup> Quoted in Turtle (1991, p. 65).

<sup>2</sup> The number of Jefferson biographies that wrestle with this issue are too numerous to cite. For brief and cogent treatments, see Stanton (1993) and Finkelman (1993).

<sup>3</sup> John Marshall freed only one of the 90 slaves he owned at his death; George Mason, who spoke against slavery at the constitutional convention, never liberated a single slave; and Patrick Henry’s will allowed his wife to free, if she chose to, just one or two of his 100 slaves. The rest were to pass to his children (source).

(1980) provided two early empirical studies of manumission. In his study of manumission in Virginia, the former found that the average manumitting slaveholder held less than 10 people in bondage, freed an average of three slaves, and rarely expressed religious or moral arguments for having done so. Kotlikoff and Rupert's study of Louisiana reveals that free blacks, not wealthy whites, were the majority manumitting group. Fogel and Engerman (1974) indirectly address the economics of manumission by estimating that the breakeven age for male slaves raised from birth was 26 years in 1850. Manumission prior to that age implied a capital loss for slaveholders, but manumitting older slaves would have been "philanthropy at bargain prices."

Three recent studies of manumission revisit the motivations of manumitters. Cole (2005) finds that some Louisiana slaveholders profited from manumitting certain slaves. Using a reduced-form hedonic pricing model, he shows that a slave who purchased his own freedom paid an average 19 percent premium over the market price. In his study of manumission in Brunswick County, Virginia Budros (2004) finds some support for his contention that events that upset the equilibrium of the slave system, such as changes in slave or commodity prices, influenced the willingness of slaveholders to manumit slaves. Finally, Wolf (2006) finds that selective manumission was not motivated principally by antislavery ideology. Rather, the seldom-realized promise of manumission was used to reinforce slavery by providing slaves with incentives to behave and work hard.

One reason, perhaps, for the relatively small scholarly literature concerning manumission and the long observed lapses in it is the presumption among slavery scholars that both the common law and the statutory law established effective prohibitions on manumission. Southern states, to be sure, regulated manumission. South Carolina and Georgia's regulations were so severe as to eliminate manumission altogether (Schiller 1992). North Carolina (1801 and 1830), Tennessee (1801 and 1831), Kentucky (1811 and 1850), Florida (1829), Maryland (1831) and Texas (1845) adopted onerous restrictions to deter slaveholders from manumitting their slaves (Wahl 1997). But statutory prohibitions created disincentives to manumit only to the extent that laws were enforced and penalties imposed.

In the Virginia case, Russell (1913, p. 82) observed that notable changes in the manumission rate were rather more "marked by changes in [public] sentiment than by changes in laws." It was the relatively loose enforcement regime between the Revolution and the Civil War that makes Virginia's experience instructive. A notable exception to general

statutory prohibitions on private manumission appeared in Virginia between 1782 and 1806, during which meaningful restrictions were lifted. This was followed by a long period between 1819 and 1865 of restricted rights, but still relatively liberal manumission. The consequence was that manumission, while not common in Virginia, was not as rare as in other southern states. Estimates range widely, but Turtle's (1991) review suggests that between 700 and 1000 slaves were manumitted annually, but the likelihood of manumission declined from about one in ten in the 1780s to about two in one hundred in the 1850s.

This study takes a new look at manumission in Virginia. After reviewing the development of manumission law in Virginia and developing a parsimonious model of manumission, the paper uses data from previously unused sources to show that manumission was not random. Estimating age at manumission with OLS and in a proportional hazards framework, the data reveal that mixed-race slaves were at greater risk for manumission, controlling for other characteristics. Dark-skinned blacks were manumitted at later ages and at lower rates than light-skinned black slaves. Those manumitted in groups or with family were manumitted at younger ages, as were the slaves of female slave owners. In addition, legal restrictions placed on manumission after 1806 and amended in 1819 led to later and reduced rates of manumission. Moreover, the hazard rate declined further after Nat Turner's 1831 Southampton rebellion. As Budros (2004) claimed, manumission practices were tied as closely to social as to economic shocks.

## MANUMISSION IN VIRGINIA

A fundamental attribute of property is how owners may dispose of it. At common law property is freely alienable -- it may be freely sold or transferred by gift -- or not. Certain types of property are inalienable in some degree and the law and economics literature offers efficiency and equity explanations for alternative inalienability rules (Calabresi and Melamed 1972 and Rose-Ackerman 1985). One underinvestigated property rule was the bundle of rights surrounding the disposal of slave property. Slaves were freely salable, of course, but most states imposed statutory restrictions on transfers by gift, particularly gratuitous transfers to the slave himself. Even when not prohibited by statute, the common law struggled with the notion of transferring a property right in the slave to the slave. In 1838 Justice Tucker of Virginia's high court expressed a widely held opinion that manumission by will or deed was not like any other property transfer. At law a slave was a thing not a person,

and therefore had no right to acquire property, even in himself. “Manumission is not strictly a gift of property,” he wrote. “It is the exoneration of a human being from the bonds which our institutions have fastened upon him.”<sup>4</sup>

In restricting manumission, southern legislators and jurists recognized a fundamental conflict between a slaveholder’s right to dispose of his property in whatever fashion deemed proper and the state’s perceived security or other interests (Schiller 1992, p. 1228). To many white southerners, one master’s decision to manumit had large, negative external effects. One contemporary bluntly observed that “Whoever emancipates a slave may be inflicting the deadliest injury upon his neighbors” (quoted in Turtle 1991, p. 39).<sup>5</sup>

Despite substantial opposition to manumission, several arguments were provided in its favor. First, slavery was antithetical to the values of a republic. In the 1780s and 1790s when the debate over manumission and emancipation peaked, Americans had just struggled through a long and difficult war to ensure their own liberties and many recognized the deep irony that some of the most vocal advocates of liberty were slaveholders.<sup>6</sup> Second, slavery was antithetical to the values of a Christian republic. Although Old Testament passages were marshaled in support of slavery, Quakers, Methodists and, for a brief time, Baptists condemned slavery as inconsistent with church doctrine.<sup>7</sup> Third, the collapse of the post-Revolutionary tobacco economy made slavery unprofitable. Fourth, an emergent liberal, laissez faire philosophy held that any restraint placed on the slaveholder’s freedom to dispose of property as he saw fit was unacceptable, regardless of whether that restraint was to be imposed by those opposed to manumission or those in favor of general emancipation. Neither position was consistent with the rights of property holders and the “liberal assumption that an owner’s right to free his slave ... took precedence over society’s interest

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<sup>4</sup> *Parks v. Hewlett*, 9 Leigh 511 (Va. 1838), quoted in Russell (1913, p. 46). Schafer (1994) investigates how Louisiana courts struggled (not always consistently) with the legal dichotomy of slaves as person and slave as property.

<sup>5</sup> Wahl (1997) also discusses the limitations placed on slaveholders in the context of externalities.

<sup>6</sup> Samuel Johnson’s comment “How is it that we hear the loudest *yelps* for liberty among the drivers of negroes?” is commonly repeated (quoted in Finkelman 1993, p. 192). The contradiction was not lost on contemporary southern slaveholders either.

<sup>7</sup> An article appearing in the *Virginia Gazette* (2 December 1773) contended that God had granted white men dominion over the Negroes of Africa, just as he had granted them dominion over horses, cows, dogs and all other animals that labored for the benefit of mankind (Wolf 2006, p. 16). When the Methodists met in Baltimore in 1784 to form the Methodist Episcopal Church, one of their first acts was to order all members to free their slaves. Although ministers met resistance to this demand, many Methodist slaveholders did liberate slaves. By the first decade of the nineteenth century, the Methodists abandoned the manumission requirement. The Quakers remained steadfast in their commitment to emancipation (Turtle 1991, pp. 56, 79-80).

in controlling the black population by keeping all Africans servile” (Wolf 2006, p. 35). Finally, supporters of liberal manumission believed that selective manumission reinforced slavery. As a general rule, manumission rewarded one or two favored slaves for dutiful service. The hope of future manumission then encouraged enslaved people to behave well and work hard. Although the odds were long – about one in ten in the 1790s, declining to about two in one hundred in the 1850s – the likelihood of manumission may have been high enough to encourage servility and effort in a majority of slaves (Budros 2004).<sup>8</sup>

Between the arrival of the first Africans in 1619 and 1667 Africans were held under terms and conditions more akin to indentured servitude than perpetual slavery, and baptism rendered a slave free (Ballagh 1902). Baptism as a route to freedom was revoked in 1667. In 1670, the right to manumit was officially recognized, but required a special act of Virginia’s House of Burgesses. Thus began what is commonly referred to as the era of public manumission; that is, manumission was legal only when it was approved by the legislature. In 1691, an act required manumitted slaves to emigrate from the colony. And in 1723 the law was further amended so that manumission for meritorious service required not only a special act of the legislature, but subsequent approval by the colonial governor and his council. Wolf (2006) believes that the 1723 law was designed to reward slaves for performing some act of great and general benefit to the white community, such as revealing an insurrection conspiracy.

Unsuccessful attempts to liberalize manumission occurred in 1769 when Thomas Jefferson and Richard Bland were publicly excoriated for having introduced a manumission bill and again in 1778 when the debate over a public manumission act for an individual slave provoked a more wide-ranging plan that was ultimately rejected.<sup>9</sup> A private manumission act finally passed in 1782; it allowed private manumission free of legislative approval. To be legal the instrument of manumission had to be acknowledged, proved in a county court, and made a matter of public record (Ballagh 1902). The substantive remaining restrictions included that slaves had to have attained their majority (18 years for women, 21 for men)

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<sup>8</sup> The shifting lines of manumission policy probably reflected changes in the relative weight of these arguments in shaping public opinion in Virginia and the back and forth of manumission policy may reflect that it took little to shift the median voter from one side to the other. A fuller understanding of manumission policy will be had only following a detailed study of its political economy.

<sup>9</sup> In later life, Jefferson related how the bill 1769 was soundly defeated and Bland, not Jefferson, was excoriated for having drafted and introduced the bill (Russell 1913; Bernstein 2004).<sup>9</sup> Jefferson’s later reticence on manumission was a product of this experience.

and be less than 45 years old. The act also made manumitters financially responsible for “imbecile” or disabled slaves. Finally, the law required manumitted slaves to obtain and carry copies of their manumission papers when they traveled outside their usual neighborhoods (Wolf 2006).

In requiring a formal manumission by deed or will, the legislature recognized private manumission as an act of personal choice, but one in which the state maintained a broad regulatory interest.<sup>10</sup> Virginia courts encouraged manumission by adopting decidedly pro-manumission policies. Written promises of testators were generally accepted as sufficient proof even if the deed or will had never been recorded and no witness could establish its validity (Ballagh 1902). Noncupative wills (deathbed distributions of personal property) were commonly accepted in manumission cases, although they were rarely valid in other instances. Creditors’ rights were protected, but even in these cases the courts labored to follow the master’s wish to manumit whenever possible. Executors charged with paying estate debts were expected to satisfy creditors from sources other than sales of slaves previously promised their freedom (Ballagh 1902). If the sale of all other property was insufficient to extinguish the estate’s debts, the remaining indebtedness could be paid by hiring out the would-be freed slaves for the time necessary to pay the debt before they were legally manumitted (Russell 1912).

For reasons that are not fully understood, in 1806 the law reverted back to that of 1691.<sup>11</sup> Slaveholders retained the right to manumit slaves by will or deed, but the new law required freed slaves to emigrate within twelve months of attaining their freedom (Ballagh 1902; Wolf 2006). If any liberated slave remained beyond the grace period, overseers of the poor were to take him into custody, sell him back into slavery and use the proceeds in support of the poor of the county. Under the 1806 law the legislature retained the right to grant waivers to the emigration requirement for slaves demonstrating “extraordinary merit.”

Russell (1912) contends that public debates over manumission died down after passage of the 1806 act for two reasons. First, the law was viewed by most critics of manumission as an effective deterrent because which masters of “morbidly tender consciences,” as Edwin Ruffin labeled those who freed slaves, would require faithful slaves

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<sup>10</sup> See *Henriette v. Barnes*, 19 La. Ann. 453 (1856) for an elaboration on this sentiment.

<sup>11</sup> Reasons given range from vague “public concerns” (Turtle 1991) to concerns over the increasing size of the free black population (Russell 1912). It may also have been a delayed response to Gabriel’s Revolt in 1800 and fears that too many kindnesses had been shown to slaves.

to abandon all that was familiar. A strictly enforced emigration requirement represented a compromise between those opposed to liberal manumission and those who would maintain the slaveholder's prerogative to liberate if his conscience demanded it. Second, the law embraced an emergent colonization movement. Emigration by way of colonization offered a way to limit the growth in the free black community even with manumission.

The law was amended twice more. In 1815 the right to grant waivers to the emigration requirement was transferred from the legislature to the county courts. The courts' ability to grant permission to remain in the state after manumission was conditioned on extraordinary merit. Finally, in 1819 the law was further amended so that viable candidates for the waiver needed to demonstrate a specific act of extraordinary merit and show that they were "sober, peaceful, orderly and industrious" (Ballagh 1912, p. 125). Because permission to remain affected the public at large, notice of application had to be posted at the courthouse for five weeks and receive the endorsement of the state's attorney. Rejections of a requested waiver could not be appealed and the right to remain could be revoked at any time for cause (Wolf 2006, p. 134).

As with many other antebellum black codes, there is evidence that manumitting slaveholders, former slaves and county officials simply ignored the emigration and extraordinary merit provisions of the 1806, 1815 and 1819 acts. Russell (1912, p. 156) estimates that by 1860 between one-quarter and one-third of Virginia's free blacks resided in the state illegally. Even when the law was observed, the "extraordinary merit" requirement was so broadly interpreted as to be meaningless. Jackson (1930) also concludes that the deterrent effect of the 1806, 1815 and 1819 laws were minimal. He finds that, for the city of Petersburg at least, the manumission rate between 1820 and 1865 was not much below that prior to 1806. Moreover, nearly every request for permission to remain was granted. Because it was free in Virginia between 1782 and 1806 and relatively free between 1819 and the Civil War, the commonwealth provides a useful laboratory for the study of manumission.

## THE ECONOMICS OF MANUMISSION

Assume that production of a commodity takes place on a farm, in a factory, or in the home with the use of slaves with identical productive characteristics.<sup>12</sup> Assume further that slaves are an input into the production process and are utilized by the slaveholder in

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<sup>12</sup> The theory of manumission was developed by Findlay (1975) and my presentation closely follows his.



whatever fashion he or she believes will maximize profits. All capital assets used in production are the property of the slaveholder and do not depreciate. In addition, the slaveholder retains all residual rights to net output sold in competitive markets. Output, denoted by  $Y$ , is a function of capital ( $K$ ) and effective labor input ( $L_D$ ) measured in units of standard efficiency.

Slaveholders elicit effort from slaves through a combination of force ( $F$ ) and incentive payments ( $I$ ), which represent a fraction of the total output ( $I = \alpha Y$ ).<sup>13</sup> Slaveholders also provided basic sustenance ( $S$ ), including food, clothing and shelter, which we assume was constant across standard efficiency labor units.<sup>14</sup> This specification precludes slaveholders from varying sustenance across slaves of equal efficiency in order to elicit exertion or other forms of reward for extra effort. Within the model, additional effort was elicited only through sharing fraction  $\alpha$  of the output. Suppose further that the interest rate or rental rate of capital,  $r$ , was determined in a competitive market.

The problem facing the slaveholder was to maximize profits, which were equal to:

$$\Pi = (1-\alpha)Y [K, L_D] - rK - F - S$$

Subject to the condition that labor demanded by the slaveholder equaled labor supplied by the slaves, or:

$$L_D = L_S[\alpha Y, F].$$

Because the slave earned income, it was possible for slaves to purchase their own freedom if they could save enough to compensate their masters for the loss of future income. Self-purchase was not uncommon. Babcock (1974), for example, finds that 10 percent of Virginia manumission papers acknowledged that slaves had purchased their freedom and Cole (2005) finds that nearly 20 percent of slaves manumitted in French New Orleans purchased their freedom. In liberating slave Hubbard Winn, G.G. Johnson of

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<sup>13</sup> Thomas Jefferson, for example, allowed his blacksmith to keep one shilling for every dollar of shop income, and his butler and painter were given annual “gratuities” of \$20, or about the equivalent of a month’s wages for an unskilled laborer (Stanton 1993, p. 157). Jefferson was not alone in eliciting effort through incentive payments to slaves. In *Waddill v. Martin* 3 Ired. Eq. 562 (N.C. 1845) the North Carolina Supreme Court determined that the slaves of a testator could continue with their long-established practice of keeping profits from the cotton they grew on their own plots. The court refused to distribute these funds as part of the testator’s estate. In doing so, the court recognized the importance of incentive payments and the necessity of enforcing agreements between slaveholder and slave. If slaves learned that such promises were legally unenforceable, the entire system of promising rewards for extra effort might have collapsed.

<sup>14</sup> Steckel’s (1987) research on slave heights suggests that slaveholders may have withheld sustenance from young slaves and significantly increased food allotments once they were old enough to work.

Petersburg recorded in his deed of manumission that “in consideration of the fact that by industry and economy he hath paid me out of his extra earnings, the full amount of the purchase money which I paid for him” (quoted in Jackson 1930, p. 307). Self-purchase represented a viable path to freedom for more than a few slaves.

The cost to the slave of saving for self-purchase was foregoing current consumption out of any incentive payments paid by the slaveholder. Instead of developing a more complex model that incorporates future freedom and current consumption in the slave’s utility function, I follow Findlay (1975) in assuming that the slave’s choice can be summarized in the decision to save a constant fraction ( $h$ ) of any incentive payments and that the slave’s savings compounded at the same rate of interest paid by the slaveholder for capital. Findlay notes that nothing essential is lost in the latter assumption and comparable results can be derived if we allow interest rates to differ, or even equal zero for slaves.

If we denote the moment at which the slave was acquired as  $t_0$ , the end of his or her working life as  $T$ , and the moment of emancipation by  $t^*$ , the problem facing a slave considering self-purchase can be written as:

$$\int_{t_0}^{t^*} h\alpha Y e^{rt} dt = \int_{t^*}^T [(1-\alpha)Y - rK - S - F] e^{-r(t-t^*)} dt$$

Where the left-hand term is the slave’s continuously compounded accumulated savings at time  $t$  and the right-hand term represents the net present value of slave income foregone should the slaveholder choose to manumit the slave.

Evaluating these integrals and using the linear Taylor-series approximations for the exponentials, it follows that:

$$[Y - rK - S - F - (1-h)\alpha Y]t^* = [(1-\alpha)Y - rK - S - F]T$$

Rearranging terms, the share of a slave’s productive life spent in bondage can be denoted as:

$$t^*/T = [(1-\alpha)Y - rK - S - F] / [(1-\alpha(1-h))Y - rK - S - F]$$

If slaves failed to or could not save (i.e.,  $h = 0$ ), it follows that  $t^* = T$  implying that the slave spent his or her entire productive life in bondage. At the other extreme, if a slave completely forsook current consumption and saved all incentive payments (i.e.,  $h = 1$ ), then the proportion of his or her working life spent in bondage equaled:

$$t^*/T = [(1-\alpha)Y - rK - S - F] / [Y - rK - S - F]$$

This expression represents the minimum fraction of a slave's productive life spent in bondage and it recognizes that the manumitting slaveholder exchanged a shorter period of exploiting his slave in return for greater labor productivity per unit of time during that shortened period. Hardworking, forward-looking slaves were rewarded with earlier freedom.

But as we have seen only about 10 to 20 percent of manumitted slaves achieved freedom through self-purchase. Another 10 to 20 percent were manumitted after being purchased by another, often a family member who had previously attained his or her freedom (Jackson 1930; Cole 2005). A relatively small fraction of manumissions were carried out because slaveholders had moral or religious misgivings about the institution of slavery. How then do we explain the majority of manumissions, most of which resulted from slaveholder "affection" for the manumitted slave or other comparable reasons?

We can think of saving more broadly than an accumulated fund of money. Faithful and diligent service surely built up a stock of goodwill with slaveholders. Especially dutiful slaves may have accumulated a stock of nonpecuniary wealth that might be exchanged for freedom at some future date. Cole (2005, p. 1015) contends that the high proportion of manumissions for "good service" suggests that incentive schemes were likely at work. Promises of manumission *in futuro* were surely made to elicit effort and were the result of extended negotiations between slave and slaveholder.<sup>15</sup> The slaveholder made a credible commitment by recording a deed or will of manumission with the terms under which freedom would be granted made conditional on continued good behavior or the occurrence of some other contingency.

Nor can we forget that some manumitted slaves were the offspring of the person granting them their freedom. Cole's (2005) study finds that about 9 percent of liberators

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<sup>15</sup> Martin (2004) discusses slave agency within the context of slave hiring. Slaves surely took an active role in achieving their own freedom.

acknowledged paternity and Jackson (1930) notes several instances of light-complected, blue-eyed slaves with straight hair and Caucasian features being set free. As both Jackson and Kotlikoff and Rupert (1980) note, these may have been the slaveholder's offspring or it may have been that some slaveholders were uncomfortable with enslaving people who so closely resembled them. The remainder of this paper investigates the importance of several observable factors believed to have influenced manumissions, including racial heritage and complexion, as well as the place and time of manumission.

## EMPIRICAL METHODS

The economic model of manumission developed above expresses the time spent in slavery as a proportion of the slave's productive life ( $t^*/T$ ). One issue in translating the terms in the theoretical model into an empirical strategy would be *a priori* knowledge of each slave's expected productive lifetime, information that is unobservable. The first approach is to assume that a slave's productive life was some fraction of a slave's life expectancy. The slave-specific expectation is unobserved, but it is assumed that the slave-specific expectation was related to the life expectancy at particular ages of slaves generally. Eblen (1974) generated life tables for male and female slaves and reports life expectations at 10-year age intervals (that is, he reports  $e_0, e_{10} \dots e_{70}$ ). I calculate the ratio  $t^*/T$  for several age-sex groups: children less than 10 using Eblen's estimates of  $e_0$ ; females between 10 and 17 years using  $e_{10}$ ; males between 10 and 20 years using  $e_{10}$ ; females 18 years and older using  $e_{20}$ ; and males 21 and older using  $e_{20}$ . In effect, I divide each sex into three groups: children, youth and adults. Additional life expectancy at ages did not differ markedly by sex, and were about 34 years at birth, about 41 years at age 10 and about 35 years at age 20. That is, at birth a slave's life expectancy was 34 years. If she survived to age 10, she could anticipate surviving to age 51; and if she survived to age 20, she could anticipate surviving to age 55.

OLS regressions of the following form are estimated:

$$(t^*/T)_i = X_i' \beta + \gamma_c + \gamma_t + u_i$$

where  $X$  is a vector of slave-specific characteristics (discussed below).  $\gamma_c$  captures county fixed effects;  $\gamma_t$  is time fixed effects; and  $u_i$  is the error term.

In the alternative, we can assume a uniform period of productivity and estimate an empirical model based on the age ( $t^*$ ) at which a slave transitions from slavery to freedom, which is observable. Imposing this restriction comes at some cost, but it allows us to

interpret the age of manumission, in the language of duration models, as the end of a “spell” spent in bondage. Adopting this approach also allows for the use of the familiar proportional hazards model. A hazard model is particularly useful here because it has two attractive features. First, it can be thought of as a reduced form resulting from a behavioral model of manumission. Second, its central idea is based on the conditional probability that we observe a transition to freedom at time  $t^*$ , given a period of bondage up to  $t^*$  (Kiefer 1988, p. 648).

Thus, the influence of slave characteristics, including productivity, on the time spent in slavery before manumission can be empirically modeled in a Weibull proportional hazards framework. Suppose that at every period the slave offered the slaveholder her accumulated savings up to that period in return for her freedom. The time (or age) at which the slave transitioned from slavery to freedom occurred when the offer met or exceeded the slaveholder’s expected foregone income. Following Kiefer (1988), the length of time a slave spent in slavery can be written as:

$$h(t) = h(0) \exp(X'\beta)$$

where  $h(0) = pt^{p-1} \exp(\beta_0)$  is a baseline hazard in which  $p$  is a shape parameter,  $t$  is time, and  $\exp(\beta_0)$  is a scale parameter. The exponential specification is convenient because the nonnegativity of  $\exp(X'\beta)$  imposes few restrictions on the estimated coefficients.<sup>16</sup>

The exponential specification also implies that  $\partial \ln h(t) / \partial x = \beta$ . The estimated coefficients are the analog of the partial derivative interpretation of the  $\beta$  vector in ordinary least squares and can be interpreted as the constant proportional effect of  $x$  on the conditional probability of observing the transition from slavery to freedom. Moreover, the sign of the coefficient indicates the direction of the effect. A positive sign implies a greater manumission hazard and a negative sign a lower hazard. Statistical packages, including STATA, commonly report the hazard ratio ( $\exp\{\beta\}$ ) instead of the raw coefficient, where values greater than one imply greater risk and values less than one lower risk.

## DATA

Age at manumission and other characteristics of the manumitted slaves are available in the free black registers maintained by Virginia’s county courts between 1793 and 1865.

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<sup>16</sup> The test for the proportional hazard assumption is a test of the null  $\ln(p)=0$ , which is equivalent to  $p=1$ . Because the Weibull specification assumes that individual hazards are increasing or decreasing in time, a rejection of the null hypothesis indicates that the Weibull distribution is appropriate for explaining individual “failures” from slavery to freedom.

Under the terms of an act of 1793, every free-born or manumitted African American residing in the state was required to register with the clerk of the court in their county of residence. For a small fee, clerks provided registrants with a copy of the registration, which served as the free person's freedom papers. The clerks also kept ledgers containing information on each free person registered. Although the Library of Virginia has thousands of the original registers in its archives, the source of the data used here is the clerks' ledgers, most of which have been photographed and are available on microfilm; several have been transcribed and published by genealogists. See the data appendix for a list of sources.

Registrations typically included the name of the registrant, including any known aliases, his or her age, sometimes an explicit acknowledgement of the registrant's sex (but it is inferred from first names when necessary), the registrant's height, complexion (black or mulatto), color (dark or light), any identifying scars, marks, tattoos or other distinguishing features, such as missing teeth, hair length, texture or color, and so forth. Too few of the registers reported the registrant's occupation to make use of that information. The registrant's county of birth, when different from county of registration, was consistently reported only after an 1850 amendment to the registration law required this information. An exemplar of a registration is as follows:

1850 September 20. No. 5314 Charlotte a free woman of colour is hereby duly registered in obedience to an order of the Hustings Court of the town of Petersburg made the 19<sup>th</sup> instant, and she is of the following description, to wit: five feet three inches high, about 64 years old, of a light complexion, has a scar on her right arm near the elbow and one on her breast, and was emancipated by Jethro Charles per deed dated 20<sup>th</sup> August 1850 and recorded in the Clerk's office of the said court Sept 13<sup>th</sup> 1850. Jno Mann, DC (Petersburg 1850-1858).

Charlotte's registration was typical in that in addition to a physical description of the person, it included information on the identity of the manumitting slaveholder and the legal instrument of manumission (deed or will). The likely series of events in this instance was that Jethro Charles took Charlotte with him to clerk Jonathan Mann's office sometime between August 20 and September 13, 1850 and recorded his deed of manumission dated August 20 with the clerk. The clerk completed Charlotte's freedom papers, which were filed with the Hustings Court and approved at the September 13 session. Jonathan Mann, then, transcribed the register into his official ledger on September 20 after the court had acknowledged and

approved both the deed of manumission and the registration. Prior to the court's approval on September 13, Charlotte was neither legally free nor officially registered.

Charlotte's register is particularly useful for this study because it is possible to assign the date of actual manumission, as opposed to the date of the deed, to a 24-day period in 1850. Charlotte's register is relatively uncommon because of the specificity of the manumission date. A more common example of a register is Polly's, also from Petersburg:

1850 August 19. No. 5224. Polly a free woman of colour is hereby duly registered in obedience to an order of the Hustings Court of the town of Petersburg made the 16th instant, and she is of the following description, to wit: five feet seven inches high, about seventy two years[,] of a black complexion, has a large scar on her left arm extending from the wrist to the elbow, the little finger of the left hand crooked and was emancipated by the last will & testament of Elizabeth Gilliam, dec'd, admitted to record in the County Court of Sussex County 1 December 1796. Jno Mann, DC. (Petersburg 1850-1858).

Unlike Charlotte's, Polly's register precludes the identification of a specific date for her manumission. All that can be stated is that she was released from bondage between December 1796 (when she was 18 years old) and August 1850 (when she was 72). *In futuro* manumission was common; promises were made and deeds recorded years, sometimes even decades prior to the date of manumission.

To reduce the error-in-variable problem for the dependent variable (age at manumission), the data includes only those instances where the date of record of the deed or will and the date of registration is separated by two years or less, unless there is other credible corroborative evidence that provides a precise date of manumission. This choice represents a tradeoff between precision and sample size. Including only instances like Charlotte's with a brief window between deed and registration decreases the measurement error, but generates a smaller sample, whereas expanding the sample to include cases involving three or five-year lags between date of deed and date of registration increases the sample size only modestly and at the cost of substantially greater measurement error.

In addition to providing information about several characteristics of the manumitted slaves, the registers also tell whether the manumission was granted by deed of sale or gift during the slaveholder's lifetime or by will upon or at some time after the testator's death. In most instances the data reveal whether the manumitted slave was liberated individually or as part of group, which may have included other members of the person's family. In rare

instances, one registration was provided to an entire family (mother and minor children), but more often groups of slaves manumitted simultaneously appeared consecutively in the records. All of this information is coded and included as correlates in the regression. Previous studies, including Kotlikoff and Rupert (1980) and Cole (2005) suggest that family manumissions are likely to include slaves manumitted at young ages. When manumitting a female of child-bearing age, it was not unusual for slaveholders to also release her minor children with her. It was less likely that she (and her children) would be released with her husband.

Table 1 provides basic summary statistics. Manumitted slaves were an average of 25.3 years old at manumission, a value that accords with Fogel and Engerman's (1974) 26-year breakeven estimate. It is also consistent with Wolf's (2006) manumission sample in which the average age at manumission was 26 years and Babcock's (1974) sample in which the median age was 25 years. As Wolf notes, a 26-year old slave was valuable property, a bit past his or her prime perhaps, but still a productive laborer.

Males represented a larger proportion of manumitted slaves at all ages, so it is logical to compare frequency distributions separately by sex; that is, Figure 1 offers two frequency distributions of age at manumission by sex. Thus, about 12 percent of males were manumitted before age 10, compared to about 16 percent of females. Generally, the distributions show that, conditional on being manumitted, that males were most likely to be manumitted between their teens and their thirties. Females, conditional on manumission, were more likely than males to be manumitted before age 20 or after age 40.

Wolf (2006, p. 74) speculates that slaveholders' greater propensity to manumit men than women may have been due to male slaves being more likely to run away and promises of manumission in return for good behavior were used as an incentive to keep them on the farm and working.<sup>17</sup> In the alternative, men may simply have been better able to find work and provide for themselves and their families in freedom. Female-headed, free black households were, in fact, more likely than male-headed, free black households to be poor and were less likely to educate children in the household (Bodenhorn and Ruebeck 2007;

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<sup>17</sup> Babcock (1974, p. 55) finds that men and women were equally likely to be manumitted by will. He doesn't report comparable statistics for slaves manumitted by deed or who successfully sued for their freedom. Cole's (2005, p.1017) frequency distributions for Louisiana show manumission skewed toward very young ages and toward women suggest that the Louisiana manumission market differed from Virginia's in some important respects.



Bodenhorn 2007). Knowing that they would be legally bound to support indigent former slaves, slave owners faced incentives to manumit slaves capable of providing for themselves and their families, which meant they were more likely to manumit still-productive males.

About one-quarter of manumitted slaves were of mixed race (listed as mulatto in the registers). Figure 2 provides two frequency distributions of manumission at age, one for each racial category. The frequency distributions in Figure 2 show that mixed-race manumissions were skewed toward younger ages. Conditional on manumission, mixed-race slaves were manumitted at younger ages – generally before age 30 – than blacks. The practice of manumitting young mixed-race slaves is often attributed to miscegenation and it is not unreasonable to expect slave owners to have manumitted slave mistresses along with their mixed-race progeny. Jackson (1930) certainly interpreted the data in this way. But Wolf (2006, p. 71) contends that the manumission of mistresses in Virginia was rare, which contrasts with practice in nearly every other slave culture from Islamic antiquity to the nineteenth-century Caribbean, and the conclusion that slaveholders were manumitting their own mixed-race children is inferred from the circumstances than learned from the manumission documents themselves. Virginia slave owners rarely admitted to interracial relationships with their slaves.

Unlike Babcock (1974), who documents the size of the manumitting slaveholder's family and slave holdings, the only information available in this data set is whether the slave owner was female and whether he or she released slaves by will (46 percent) or deed (51 percent). (The remaining 3 percent of slaves successfully sued for their freedom and are coded as having been manumitted by court order.) Further, the data reveal whether slaves were manumitted in a group or with family. While family manumissions were likely to accelerate the time to manumission because most family manumissions were parents and minor children, the effect of group manumissions of unrelated slaves is ambiguous. It may be that slaveholders manumitted a cross-section of their slaves at a point in time, or they may have purposely favored younger or older slaves. A priori there is no way of knowing which practice dominated.

In fact, both group and family manumissions accelerated the time to manumission. Female slaves liberated alone were freed, on average, at age 34; males at age 38. Females manumitted as one of a group were freed at age 25; males at age 24. The pattern among family manumissions is similar. The average age at manumission for both males and females

liberated without additional family was 36 years. It was about 23 years for those liberated with family.

The regressions also include the contemporary price of slaves to capture the economic incentives to manumit. As Kotlikoff and Rupert (1980) note, the effect of slave prices on manumission is ambiguous. On one hand, an increase in the price of slaves increases the slaveholder's wealth and may induce greater philanthropy, including gratuitous manumission. On the other, higher slave prices increases the cost of charity toward slaves relative to other forms of charity, so that higher slave prices may reduce the number of manumissions or delay the time to manumission. The values employed in the regression are prices for prime field hands at New Orleans, not average Virginia prices, but the interstate slave trade was such that regional markets were reasonably integrated.

Finally, Table 1 reports the county or city in which the instrument of manumission was executed as well as the time period. The data are drawn from all of (modern) Virginia's regions. The Chesapeake region (Norfolk, Northampton and Surry) is underrepresented with just 7 percent of the sample, while the Northern Neck (Arlington, Fairfax, Fauquier and Loudon) is overrepresented with 34 percent of the sample. The Mountain region (Augusta and Montgomery) represents 12 percent of the sample and the Piedmont the remaining 45 percent. Urban manumission is also overrepresented relative to the slave population at risk of manumission. Petersburg, Norfolk and Lynchburg account for 12 percent of the sample, and the 14 percent of the overall sample drawn from Arlington County is probably made up of a large number of slaves manumitted in Arlington City. Henrico County surrounded Richmond City and Amherst County neighbored Petersburg, so these might be labeled suburban. Because Jackson (1930) studied urban manumission and Budros (2004) rural manumissions in a single county, this is the first study to provide a statistical analysis of urban, suburban and rural manumissions from a cross-section of Virginia's slaves at risk for manumission.

The time periods reported in Table 1 accord with the evolution of Virginia's manumission law outlined above. The one exception is the decision to divide the 1820 to 1865 period of regulated free private manumission into two subperiods. The 1831 division reflects the potential influence of Nat Turner's rebellion in Southampton County on slaveholder incentives to manumit. Although no free blacks were implicated as conspirators in Nat Turner's revolt, there was widespread public perception that free blacks directly or

indirectly encouraged the rebellion. Fears of future rebellions may have undermined the impulse toward manumission.

## RESULTS

The analysis proceeds in two parts. First, full sample results are discussed. A second step excludes mixed-race individuals to determine whether the complexion gap in manumission resulted from race per se or was dependent, at least in part, on differences in skin shade among blacks.

### *Full sample results*

Table 2 reports eight regression specifications – four OLS and four Weibull proportional hazards -- on a sample of 747 manumissions for which all independent variables are observed. The estimates proceed from a baseline specification that includes slave prices, the personal characteristics of the manumitted slave, the instrument of manumission (deed or court order, will is the excluded category), and whether the manumitting slaveholder was female. Later specifications add controls for whether the manumitted slave was liberated as part of a group of slaves and whether he or she was manumitted with one or more family members; county fixed effects are added next, followed by time fixed effects to control for the legal regime under which manumissions occurred. The excluded category is the period of liberal manumission between 1782 and 1806. In all specifications, the standard errors are clustered on manumission groups, because simultaneous manumissions are not independent observations.<sup>18</sup>

The estimated constant term in the OLS specifications implies that the average manumitted slaves, contingent on being manumitted, spent between half and three-quarters of his life in bondage. The estimated intercept from the full specification implies that manumitted slaves lived about two-thirds of their expected lives in bondage. According to Fogel and Engerman's (1974) estimates, manumission any time after age 26 was "philanthropy at bargain prices" because the slave had, by that time, repaid the master for his or her rearing and maintenance costs plus a normal economic return. With a weighted

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<sup>18</sup> Clusters are those for groups observed in the data set. It is possible that some slaves were liberated as a part of group or family, but unless other members of the group or family appear in the registrations, the slave is considered an independent observation.

slave life expectancy at manumission of about 50 years, the estimates generated from this data suggest that slave owners who chose to manumit a slave did so when the slave was about 33 years old, controlling for other characteristics, which is about seven years later than the raw average of 25 years.

There is no observable effect of slave prices on the age at manumission. Although the coefficients are estimated precisely in columns 4 and 8, the OLS coefficient is not meaningfully different from zero and the estimated hazard ratio is not economically different from one (i.e., the first nonzero digit appears at the fourth decimal point). This may be a consequence of the ambiguous wealth effect posited by Kotlikoff and Rupert (1980); it may be that New Orleans slave prices do not accurately capture Virginia market realities; or, it may signify that something other than the market prices of slaves was the fundamental driver of manumissions.

Race played a powerful role in determining age at manumission. The estimated hazard ratio of 1.46 in column 8 implies that mixed-race slaves were manumitted at a rate about 46 percent greater than black slaves.<sup>19</sup> The OLS coefficient in column 4 implies that mixed-race slaves were manumitted after having served 10 percent less of their expected lifetimes in bondage than similarly situated black slaves. Figure 3 plots survival functions for blacks and mixed-race slaves at the mean of all covariates, except the race variable. It reveals that mixed-race slaves were at greater hazard of manumission at every age than were blacks. Several studies reveal occupational and wealth advantages for free mixed-race African Americans in the mid-nineteenth century, and the result here suggests that the mixed-race advantage operated even in slavery (Bodenhorn 2003; Bodenhorn 2006; Bodenhorn and Ruebeck 2007).

Jackson (1930) and Kotlikoff and Rupert (1980) remain agnostic on the mechanism underlying the mixed-race slaves' advantage in the manumission market. The overrepresentation of light-skinned, mixed-race children may be suggestive of white, particularly master's parentage, or it may be that white slaveholders had a harder time reconciling their consciences over slavery when the enslaved looked so much like the masters.<sup>20</sup> While Jefferson never fully revealed the criteria he used in selecting just eight of

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<sup>19</sup> See Hosmer and Lemeshow (1999 Chapters 6 and 8) for discussions concerning the interpretation of estimated hazard ratios.

<sup>20</sup> See Walter Johnson's (date) article on white slaves.

his slaves for manumission, it is telling that all eight were mixed-race and light skinned. Sally Hemings was allegedly his mistress and some may have been his children by Hemings (Gordon-Reed 2008). On the other hand, Margo (1992) offers a potential productivity reason in that mixed-race slaves were more likely than blacks to be skilled. In these instances, slaves would generate more income for the slaveholder and potentially more for themselves, implying a more rapid accumulation of savings sufficient to compensate a slaveholder for early manumission. Absent better information on each manumitted slave's occupation and his or her paternity, the relative weight of the miscegenation versus productivity debate will remain unresolved.

Estimated coefficients on other variables highlight several additional aspects of manumission. Although manumission by deed did not increase the rate at which slaves achieved freedom relative to manumission by will nor did it accelerate the age at which it occurred, slaves that brought a successful freedom suit achieved freedom after having served about 12 percent less of their life in slavery. Successful freedom suits were generally pursued by two types of slaves: term slaves, or those bound to service until some specific age, often their thirty-first birthday, and slaves who sued when their master reneged on an earlier promise to manumit at a specific time. Manumission cases were one of the few instances in which slaves had legal standing, and southern courts were generally disposed to find in favor of freedom when there was credible evidence to support a claim of breach of promise (Morris 19xx).

Slaves manumitted by female slave owners were manumitted at a 22 percent greater rate than slaves owned by men. The OLS estimate in column 4 suggests that slaves manumitted by a female slave owner served about six percent less of their life in bondage, compared to slaves owned by men.

Slaves manumitted as part of group or with kin were at about a 38 percent greater risk of manumission and were manumitted at significantly younger ages. The likely mechanism was that slave owners' group and family manumissions tended to include mothers and young children, which worked to reduce the estimated age at manumission.

Finally, Jackson's (1930) claim that manumission was nearly as free in the period after 1820 as it was in the era of liberal manumission between 1782 and 1806 is not supported by the data. Relative to the earlier period, the manumission hazard rate decreased dramatically between 1820 and 1831, and declined even further in the three decades

following Nat Turner's rebellion. Additionally, slaves manumitted between 1820 and 1831 served about 12 percent more of their lives in bondage than those freed earlier; and those freed after Nat Turner's rebellion served more than 20 percent more of their lives in bondage. Manumission in Virginia did not cease in this last period, but official policy and social norms militated against it. Thomas Jefferson had earlier counseled against manumission, claiming that neither whites nor blacks were prepared to live together as equals. Virginia's slave owners increasingly moved toward Jefferson's position. One contemporary wrote: "A man has almost as good a right to set fire to his own buildings though his neighbor's is to be destroyed by it, as to free his slaves" (Dorfman 1946, I: 281). Responding to a slave insurrection, hundreds of reported conspiracies, as well as a more vocal abolitionist movement and the increasing number of free blacks, the period after 1830 witnessed the formulation of the positive good theory of slavery. It is not surprising then that public opinion turned against liberal private manumission.

*Was it complexion or race?*

Emergent literatures in economics, sociology and other social sciences document the existence of color-based preferences within the African-American community itself, as well as among whites toward blacks. Historically, light-skinned African Americans were healthier and wealthier than blacks, and blacks exhibited color-conscious assortative mating (Bodenhorn 2003; Bodenhorn 2006; Bodenhorn and Ruebeck 2007).<sup>21</sup> A recurring question centers on whether this color consciousness was based on color per se or whether it followed from an association of light complexions with white ancestry and any white privilege that resulted thereby.

The manumission data offers a unique opportunity to test this hypothesis because registers provided detailed descriptions of individuals, including color descriptors such as black, very black, light, dark and others that can be collapsed into a three meaningful color categories. County court clerks were careful to distinguish between blacks and mixed-race individuals with known white ancestry. There is reason to trust the accuracy of the clerks' descriptions. Although white Virginians only rarely acknowledged paternity (or maternity, for that matter) of mixed-race offspring, it was often public knowledge. Consider the

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<sup>21</sup> Studies of modern African Americans find comparable color consciousness. See, for example, Ruebeck, Averett and Bodenhorn (2009), Rangel (2007), Goldsmith, Hamilton and Darity (2006, 2007).

registration of Frankey McIntosh, the daughter of Molly McIntosh, in which a justice of the peace attests:

I have known Mary aka Molly McIntosh from the time she was a Girl, that the said Molly where she was a Girl lived in the family of Argalous Price of Orange County near where I then lived, that common reports said, and ... I have heard it from the family of Mr. Price in which she lived, that said Molly was the mulatto bastard child of Ann McIntosh a [illegible] servant woman while a servant in said Argalous Price, I know that the said Molly lived in the family of the said Price and I believe till she was thirty one years old [when released from servitude]. Arlington County (1801-1822), Register No. 5 (1803).

Not every registration contains such detail on a registrant's background, but it was not uncommon for clerks to record the name, complexion and status of the registrant's mother. (Under Virginia law, a child's status – free or slave -- followed the mother's.) Clearly, clerks and the white witnesses who attested to the accuracy of the information provided by the registrants knew a great deal about the backgrounds of black and mixed-race residents.

Table 3 reports the results of OLS and Weibull proportional hazard specifications comparable to those reported in Table 2, except that the mixed-race individuals are dropped from the sample and blacks are divided into light black, black (the excluded group) and dark black categories based on the register descriptions.<sup>22</sup> The results, in most respects, are comparable to those reported for the full sample. Slave prices neither increased nor decreased the time spent in bondage. Being manumitted with groups or with family members dramatically shortened the time spent in bondage, among those slave fortunate enough to have been manumitted. And the proportion of a slave's life spent in bondage increased in the thirty years after Nat Turner's rebellion.

Among blacks, dark complexion decreased the hazard of manumission. Figure 4 reveals that the survival function of dark blacks everywhere exceeds the survival function of blacks up to about age 65. Color per se also influenced the time blacks spent in slavery. The hazard ratio implies that dark-skinned blacks were manumitted at about two-thirds the rate of medium-skinned blacks and that dark blacks who were manumitted lived about 10 percent more of their lives in bondage than medium- or light-skinned blacks. It is difficult to

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<sup>22</sup> The dark black category include those listed in a register as "dark," "dark negro," "dark brown," "black," "dark copper," and "very black." The light black category includes "light," "light negro," "bright," "bright negro," "light brown," and "very bright." The black category includes those listed as "negro," "brown," and "copper." African Americans described as "yellow" and "dark yellow" were excluded from all categories, because contemporaries used these terms to describe both blacks and mulattoes.

construct a productivity based explanation of the complexion effect, unless dark-complected slave children were disproportionately sent to work in the fields and thereby failed to develop domestic or artisanal skills rewarded by Virginia's slave owners.

## CONCLUSIONS

After a long period of little research into the subject, manumission in the antebellum South has attracted the attention of historians, sociologists and economists. This study adds to the literature by illuminating some of the factors that influenced slaveholders' decisions to manumit slaves. Whereas slave prices had no meaningful influence, the productive characteristics of slaves, including sex, race and height, altered the slaveholder's calculus and partially determined how long slaves lived in bondage. Slaves of female slave owners were manumitted at younger ages, as were mixed-race slaves. Female slaves were not manumitted earlier than men. Outside domestic or household service, female slaves were less productive in the daily grind of hard manual labor involved in most plantation work and were less able to generate enough extra output through extra effort to purchase their freedom. Mixed-race slaves, on the other hand, were more likely to work at skilled or semi-skilled occupations on large plantations and could amass enough savings to purchase their own freedom. It is hard to resist drawing the conclusion that white parents favored their mixed-race offspring with freedom at relatively young ages. But, as Wolf (2006) notes, such a conclusion is inferred from the circumstances rather than confirmed by the evidence.

Finally, the results here also reveal the importance of what Budros (2004) labeled "social shocks" to manumission. Manumission law in Virginia and elsewhere in the antebellum South was alternatively free and proscribed and prohibited and back again. Although the measure of social shocks used here are simple dummy variables designed to capture the public's sentiment toward liberal private manumission, the consequences of social shocks, including a post-Revolutionary embrace of it and a post-Nat Turner turn against it, the consequences were undeniable. Freedom became much harder to attain in the thirty years leading up to the Civil War. More research is needed to fully understand the political economy of southern manumission policy.

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## DATA APPENDIX

Slave prices are taken from Carter, et al., who report the Conrad and Meyer series developed by visual inspection of a graph published by Ulrich B. Phillips in *Life and Labor in the Old South* (1935). They also report series constructed by Stanley L. Engerman and Lawrence Kotlikoff. The Engerman and Kotlikoff series are derived from exchange prices in the New

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Montgomery County, Virginia.

Norfolk County, Virginia. 1850-1861. Register of Free Negroes. Local Government Records Collection Microfilm #105. Library of Virginia.

Northampton County, Virginia.

Petersburg City, Virginia. 1850-1858. Register of Free Negroes. Local Government Records Collection Microfilm Reel #123. Library of Virginia.

Petersburg City, Virginia. 1859-1864. Register of Free Negroes. Local Government Records Collection Microfilm Reel #123. Library of Virginia.

Pittsylvania County, Virginia.

Powhatan County, Virginia. 1820-1865. Register of Free Negroes. Local Government Records Collection Microfilm #45. Library of Virginia.

Surry County, Virginia. Dennis Hudgins. 1995. *Surry County Virginia Register of Free Negroes*. Richmond: Virginia Genealogical Society.



Figure 1: Frequency distribution of manumitted slaves by age and sex

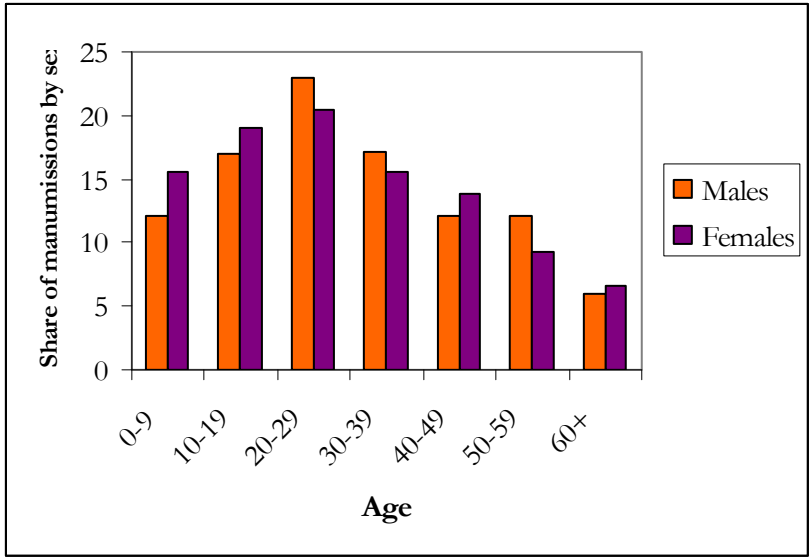


Figure 2: Frequency distribution of manumitted slaves by age and ancestry

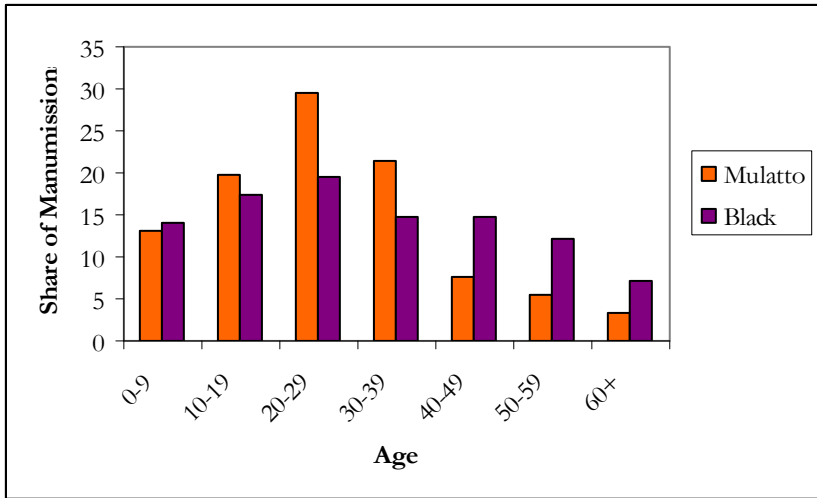


Figure 3: Survival function: mixed-race versus black manumittedes

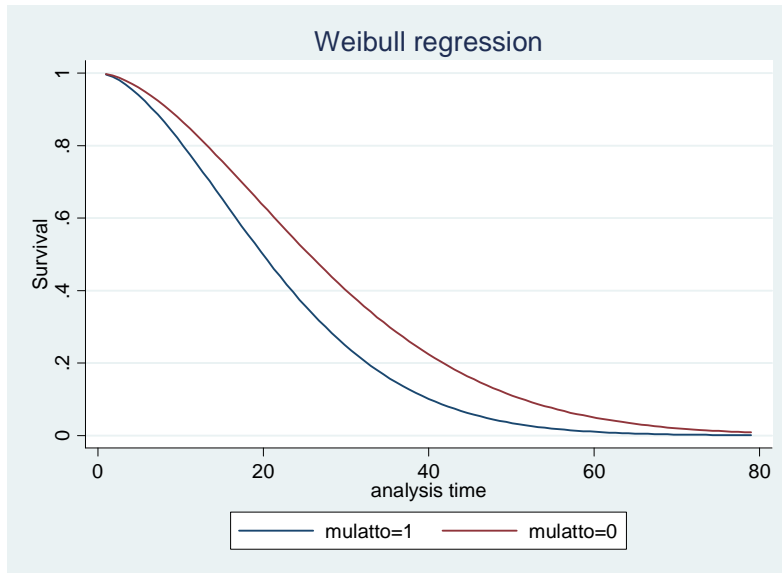


Figure 4: Survival function: light-black versus dark-black

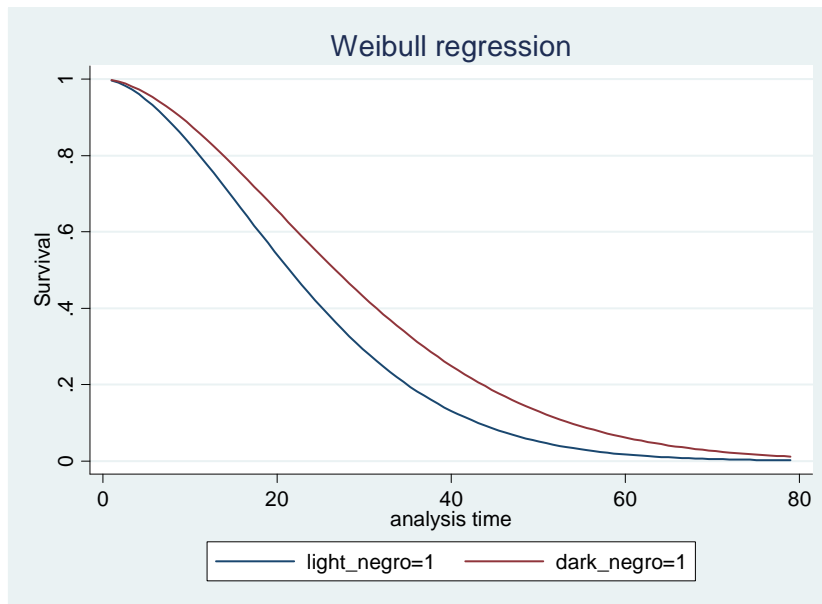


Table 1: Summary statistics

Variable	Definition	Obs	Mean	Std Dev
Age	Age at manumission (in years)	859	25.3	17.5
Slave Price	Price of prime field hand	860	1075.6	314.0
Z score	Slave height as z-score of modern standard	761	-0.99	1.26
Centile	Slave height as centile of modern stature	761	0.26	0.26
Slave Female	Manumitted slave female	860	0.45	
Mulatto	Manumitted slave identified as “mulatto”*	845	0.24	
Light	Manumitted slave identified as “light” negro**	845	0.17	
Negro	Manumitted slave identified as negro**	845	0.07	
Dark	Manumitted slave identified as “dark” negro**	845	0.47	
Owner Female	Owner manumitting slave was female	860	0.20	
Group	Manumitted in a group	860	0.77	
Family	Manumitted with other family members	860	0.68	
Deed	Manumitted by deed	855	0.42	
Court Order	Manumitted by court order	855	0.03	
Will	Manumitted by will	855	0.55	
1796-1806	Liberal manumission policy	860	0.03	
1807-1815	Manumitted slave required to emigrate from Va	860	0.01	
1816-1819	Waiver of emigration from county courts	860	0.02	
1820-1831	Waiver requires demonstration of merit	860	0.24	
1831-1862	Waiver with merit, post-Nat Turner insurrection	860	0.70	
Amherst	Manumitted in Amherst County	860	0.01	
Arlington	Manumitted in Arlington County	860	0.14	
Augusta	Manumitted in Augusta County	860	0.05	
Bedford	Manumitted in Bedford County	860	0.02	
Fairfax	Manumitted in Fairfax County	860	0.06	
Fauquier	Manumitted in Fauquier County	860	0.08	
Henrico	Manumitted in Henrico County	860	0.02	
Loudon	Manumitted in Loudon County	860	0.06	
Louisa	Manumitted in Louisa County	860	0.13	
Lynchburg	Manumitted in Lynchburg City	860	0.01	
Montgomery	Manumitted in Montgomery County	860	0.07	
Norfolk	Manumitted in Norfolk City	860	0.01	
Northampton	Manumitted in Northampton County	860	0.01	
Petersburg	Manumitted in Petersburg City	860	0.10	
Pittsylvania	Manumitted in Pittsylvania County	860	0.16	
Surry	Manumitted in Surry County	860	0.05	

Sources: Slave prices from Carter et al (2006), Series Bb209; all other data from freedom registers listed in Data Appendix.

Notes: \* Mulatto category includes those identified as bright mulatto, light mulatto, mulatto, dark mulatto, and nearly white. \*\* Light negro category includes those identified as light negro, bright negro, light brown, and very bright negro. Negro includes those identified as negro, brown and copper. Dark negro includes those identified as dark, dark negro, dark brown, dark copper, black and very black. Individuals identified as yellow were excluded from all categories because the term was applied to both blacks and mulattoes, often without qualification.





Table 2: Hazard ratios from Weibull proportional hazards estimation of age at manumission

Full sample

Independent variables	OLS estimates: dependent variable = $t^*/T$				Weibull hazard ratios: dependent variable= $t^*$			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Slave prices	7.00 e-06 (0.18)	4.95e-06 (0.18)	-1.84e-5 (0.00)	7.95e-5* (0.07)	1.000 (0.75)	1.000 (0.27)	1.000 (0.49)	1.000* (0.08)
Mixed race	-0.112*** (0.00)	-0.108*** (0.00)	-0.101*** (0.00)	-0.101*** (0.00)	1.544*** (0.00)	1.462*** (0.00)	1.457*** (0.00)	1.460*** (0.00)
Slave female	-0.029* (0.09)	-0.006 (0.70)	0.002 (0.89)	0.006 (0.68)	1.03 (0.59)	0.935 (0.30)	0.919 (0.20)	0.899 (0.12)
Z score of modern stature (demeaned)	0.015 (0.16)	0.012 (0.21)	0.009 (0.34)	0.008 (0.38)	0.965 (0.37)	0.973 (0.48)	0.982 (0.63)	0.981 (0.63)
Manumission by deed	0.110*** (0.00)	0.028 (0.20)	0.045 (0.15)	0.040 (0.18)	0.702*** (0.00)	0.938 (0.45)	0.857 (0.16)	0.864 (0.15)
Manumission by court order	0.016 (0.29)	-0.137*** (0.01)	-0.119** (0.05)	-0.142** (0.03)	0.94 (0.76)	1.553*** (0.02)	1.424* (0.06)	1.462** (0.05)
Slaveholder female	-0.049 (0.14)	-0.051** (0.03)	-0.063*** (0.01)	-0.070*** (0.00)	1.17 (0.10)	1.210*** (0.01)	1.200** (0.02)	1.219*** (0.00)
Group manumission		-0.064* (0.06)	-0.078** (0.02)	-0.078*** (0.00)		1.282** (0.02)	1.355*** (0.00)	1.376*** (0.00)
Family manumission		-0.137*** (0.00)	-0.111*** (0.00)	-0.126*** (0.00)		1.44** (0.00)	1.328** (0.02)	1.383*** (0.00)
Manumitted 1807-1815				0.111 (0.15)				0.806 (0.26)
Manumitted 1816-1819				-0.119* (0.10)				1.526* (0.09)
Manumitted 1820-1831				0.128** (0.04)				0.738* (0.09)
Manumitted 1832-1862				0.205*** (0.00)				0.558*** (0.00)
Constant`	0.564*** (0.00)	0.729*** (0.00)	0.743*** (0.00)	0.642*** (0.00)				
County/city controls	No	No	Yes	Yes	No	No	Yes	Yes
R-square	0.06	0.13	0.16	0.17				
Ln(p)					0.511*** (0.00)	0.519*** (0.00)	0.527*** (0.00)	0.536*** (0.00)
Observations	747	747	747	747	746	746	746	746
Log pseudolikelihood					-812.94	-794.66	-787.95	-782.02

Notes: P-values of coefficient estimates in parentheses. Standard errors corrected for clustering on group manumission. Slave prices are the Phillips series as interpreted by Conrad, Meyer and Sutch and reported in Carter et al. (2006), Series Bb209. Because this series does not include prices for 1861-1862, prices for these two years are taken from Kotlikoff's Series Bb211. Regressions estimated using the Fogel and Engerman values (Series Bb210) yielded nearly identical results.

Sources: author's calculations from data taken from sources in Data Appendix.

Table 3: Hazard ratios from Weibull proportional hazards estimation of age at manumission:  
Blacks only

Independent variables	OLS estimates: dependent variable = $t^*/T$				Weibull hazard ratios: dependent variable= $t^*$			
	(1)	(2)	(3)	(4)	(1)	(2)	(3)	(4)
Slave prices	-8.79e-7 (0.98)	-9.87e-6 (0.79)	-2.8e-5 (0.55)	-9.4e-5* (0.09)	1.000 (0.58)	1.000 (0.16)	1.000 (0.35)	1.000 (0.17)
Light black	-0.050 (0.35)	-0.047 (0.28)	-0.051 (0.28)	-0.037 (0.48)	1.326 (0.14)	1.358* (0.08)	1.394** (0.05)	1.372* (0.07)
Dark black	0.108*** (0.01)	0.092** (0.02)	0.101*** (0.01)	0.098*** (0.01)	0.720** (0.02)	0.717** (0.03)	0.679*** (0.01)	0.688*** (0.01)
Slave female	-0.002 (0.91)	0.013 (0.46)	0.025 (0.17)	0.028 (0.13)	0.947 (0.42)	0.854** (0.04)	0.835** (0.02)	0.829** (0.02)
Z score of modern stature	2.0e-4 (0.98)	-6.2e-4 (0.96)	-9.0e-4 (0.94)	-0.003 (0.84)	0.995 (0.91)	1.006 (0.88)	1.001 (0.98)	1.002 (0.96)
Manumission by deed	0.102*** (0.00)	0.011 (0.64)	0.046 (0.14)	0.047 (0.16)	0.727*** (0.00)	1.055 (0.56)	0.900 (0.38)	0.898 (0.39)
Manumission by court order	-0.008 (0.91)	-0.173** (0.02)	-0.108 (0.17)	-0.126 (0.13)	0.988 (0.97)	1.839** (0.02)	1.496* (0.09)	1.442 (0.15)
Slaveholder female	-0.062* (0.08)	-0.055** (0.03)	-0.056** (0.05)	-0.059** (0.04)	1.195* (0.10)	1.203** (0.03)	1.157 (0.11)	1.176* (0.10)
Manumitted in a group		-0.090*** (0.00)	-0.100*** (0.00)	-0.106*** (0.00)		1.476*** (0.00)	1.509*** (0.00)	1.542*** (0.00)
Manumitted with family		-0.145*** (0.00)	-0.141*** (0.00)	-0.151*** (0.00)		1.506*** (0.00)	1.496*** (0.00)	1.554*** (0.00)
Manumitted 1807-1815				0.139 (0.21)				0.925 (0.80)
Manumitted 1816-1819				-0.033 (0.66)				1.268 (0.29)
Manumitted 1820-1831				0.148 (0.13)				0.989 (0.097)
Manumitted 1832-1862				0.246*** (0.01)				0.678 (0.20)
Constant	0.493*** (0.00)	0.707*** (0.00)	0.693*** (0.00)	0.566*** (0.00)				
County/city controls	No	No	Yes	Yes	No	No	Yes	Yes
R-square	0.08	0.16	0.19	0.21				
Ln(p)					0.499*** (0.00)	0.524*** (0.00)	0.538*** (0.00)	0.543*** (0.00)
Observations	572	572	572	572	571	571	571	571
Log pseudolikelihood					-625.02	-603.34	-596.90	-594.18

Notes: Dependent variable is age at manumission. P-values of coefficient estimates in parentheses. Standard errors corrected for clustering on group manumission. Slave prices are the Phillips series as interpreted by Conrad, Meyer and Sutch and reported in Carter et al. (2006), Series Bb209. Because this series does not include prices for 1861-1862, prices for these two years are taken from Kotlikoff's Series Bb211. Regressions estimated using the Fogel and Engerman values (Series Bb210) yielded nearly identical results.

Sources: author's calculations from data taken from sources in Data Appendix.

