

# Appendices (For Online Publication)

## Start-Up Nation? Slave Wealth and Entrepreneurship in Civil War Maryland

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## A Theory

In this section, we present a simple theoretical framework to study the effects of slave wealth on business entry and exit before and after abolition of slavery. The model is based on a credit rationing model in [Tirole \(2006\)](#). There are two players: (1) credit constrained entrepreneurs that pledge assets and future returns to obtain start-up funding for their business projects, and (2) lenders supplying funds to potential entrepreneurs. An entrepreneur can be a slaveowner or a non-slaveowner. Slave wealth is allowed to play two different roles: (1) slaveowners have a relative advantage in coercing slaves to produce at a lower cost, and (2) lenders prefer slave wealth over other pledgeable assets (e.g. land) due to its higher liquidity. We call these mechanisms the “cost of production” channel and the “collateral” channel.

We obtain three insights from the model. First, both mechanisms imply that, conditional on total wealth, slaveowners are more likely to enter into the credit market because they are required to pledge less wealth. Second, since abolition eliminates any potential benefits of slave wealth, slaveowners and non-slaveowners enter with equal probability after this event. Finally, abolition has an effect on the likelihood of business exit among slaveowners only if the cost of production channel is active. We use these insights to guide our interpretation of the relative importance of mechanisms.

### A.1 Environment

Each entrepreneur is endowed with a business project that requires an investment level  $I > 0$ . The project generates (discounted) returns equal to  $R$  if successful. A project’s success depends on completing a set of (potentially labor-intensive) tasks that are necessary for production (i.e. effort). The probability of success is given by  $p = p_H$  when tasks are completed and  $p = 0$  otherwise. The cost of completing these tasks is equal

to  $\gamma B$ , with:

$$\gamma = \begin{cases} 1 & \text{if Slaves} = 0 \\ \bar{\gamma} \leq 1 & \text{if Slaves} > 0, \end{cases}$$

where  $\bar{\gamma}$  captures any potential advantages in the cost of production that slaveowners may enjoy as a consequence of having a relative advantage in using coercion to make slaves more productive.<sup>1</sup>

To obtain funding, entrepreneurs pledge future returns and physical assets. The cost of exerting effort limits the returns that an entrepreneur can credibly pledge, as a compensation for exerting effort is needed. Lenders force entrepreneurs to pledge physical assets when pledgeable returns are insufficient. These assets are transferred to the lender in case of business failure. We denote the choice of the level of pledged assets by  $C$  and we assume that, due to the liquidity of these assets or buyer-seller matching frictions, lenders value these assets in  $\beta C$ , with  $\beta < 1$ .

Let the net present value (NPV) of a project to be positive when an entrepreneur exerts effort:

$$\text{NPV} = p_H R - I - (1 - p_H)(1 - \beta)C - \gamma B > 0,$$

where  $p_H R$  are the expected returns generated by a project, and  $(1 - p_H)(1 - \beta)C$  the wealth that is lost, in expectation, due to market frictions. Note that, since pledging assets creates a deadweight loss, entrepreneurs will want to pledge the minimum level of assets subject to getting project funding.

## A.2 Incentives

Let  $R_b \in [0, R]$  be the portion of returns that are captured by an entrepreneur when a project is successful. Then, an entrepreneur decides to complete all business tasks

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<sup>1</sup>We follow [Acemoglu and Wolitzky \(2011\)](#) who present a framework where effort and “guns” are complements in equilibrium.

if the benefits are greater than the costs. The entrepreneur's incentive compatibility constraint is:

$$p_H R_b - (1 - p_H)C - \gamma B \geq -C \quad \Rightarrow \quad R_b \geq \gamma B / p_H - C. \quad (1)$$

Participation of a lender, on the other hand, depends on the expected payoff, which must be at least equal to the investment:

$$p_H(R - R_b) + (1 - p_H)\beta C \geq I \quad (2)$$

Since pledging assets is costly, an entrepreneur pledges the highest level of future returns subject to equation (1). Pledging additional returns allows an entrepreneur to reduce the amount of collateral required. Replacing equation (1) into equation (2), and noting that an entrepreneur chooses to pledge the minimum level of assets such that equation (2) holds, we obtain:

$$C(\beta, \gamma) = \frac{I - p_H(R - \gamma B / p_H)}{p_H + (1 - p_H)\beta}. \quad (3)$$

Note that only entrepreneurs who are wealthy enough to pledge  $C(\beta, \gamma)$  will obtain project funding.

### A.3 Business entry

From equation (3), we note that when slaveowners have a cost advantage ( $\bar{\gamma} < 1$ ), the lender reduces the collateral requirement for slaveowners. This happens because, as it is less costly for a slaveowner to exert effort, slaveowners demand less compensation for it. As a consequence, they are able to credibly pledge a higher portion of a project's return. Since pledging assets and future returns are substitutes, this lowers the amount of collateral that lenders require from slaveowners. It follows that slave wealth can explain differences in credit-access among otherwise equal entrepreneurs. To see this, note that slaveowners with wealth levels  $W \geq C(\beta, \bar{\gamma})$  are able to get funding, while only a subset of non-slaveowners with wealth levels in this range are able to get fund-

ing. Specifically, only non-slaveowners with wealth levels  $W \geq C(\beta, \gamma = 1) > C(\beta, \bar{\gamma})$  get credit. The following proposition summarizes this discussion:

**Proposition 1.** *If  $\bar{\gamma} < 1$ , then a slaveowner has a probability of obtaining project funding that is greater or equal than that of an equally wealthy non-slaveowner. This inequality is strict for entrepreneurs with wealth levels in the range  $[C(\beta, \bar{\gamma}), C(\beta, \gamma = 1)]$ .*

We now consider how the composition of wealth, i.e. the collateral channel, affects credit access. From equation (3) we note that  $\partial C(\beta, \gamma) / \partial \beta < 0$ . This means that offering assets that are more valuable to suppliers reduces the amount of collateral required. Let there be two assets: slaves and land. Given that slaves were more liquid and mobile, we assume suppliers preferred slave wealth over real estate wealth:  $\beta_{\text{slaves}} > \beta_{\text{land}}$ . Then, since collateral requirement is decreasing in asset liquidity, we have that:

$$C(\beta_{\text{land}}, \gamma) > C(\lambda\beta_{\text{land}} + (1 - \lambda)\beta_{\text{slaves}}, \gamma) > C(\beta_{\text{slaves}}, \gamma), \quad (4)$$

where  $\lambda \in (0, 1)$ . This means that slaveowners have a higher chance of getting credit relative to equally wealthy entrepreneurs that hold less slave wealth. Then, wealth composition can explain differences in credit access when slave wealth is a better collateral. The following proposition summarizes this discussion:

**Proposition 2.** *If  $\beta_{\text{slaves}} > \beta_{\text{land}}$ , then a slaveowner has a probability of obtaining project funding that is greater or equal than that of an equally wealthy entrepreneur who owns less slave wealth. This inequality is strict for entrepreneurs with wealth levels in the range  $[C(\beta_{\text{slaves}}, \gamma), C(\beta_{\text{land}}, \gamma)]$ .*

In sum, slave wealth has two potential effects on business entry. First, due to the cost of production channel, the model predicts that a slaveowner has a higher probability of getting credit than an equally-wealthy non-slaveowner entrepreneur. Second, due to the collateral channel, wealth composition may also explain differences in credit access.

## A.4 Abolition

Abolition of slavery eliminates both the collateral and the cost of production channel. The former is equivalent to a wealth shock that forces former slaveowners to pledge fewer liquid assets. The latter is equivalent to the elimination of any advantage in the cost of production that slaveowners may have enjoyed ( $\gamma = \bar{\gamma} = 1$ ) as coerced slaves are no longer available to slaveowners. Since abolition eliminates both mechanisms, slaveowners and non-slaveowners with similar wealth now enter credit markets with equal probability.

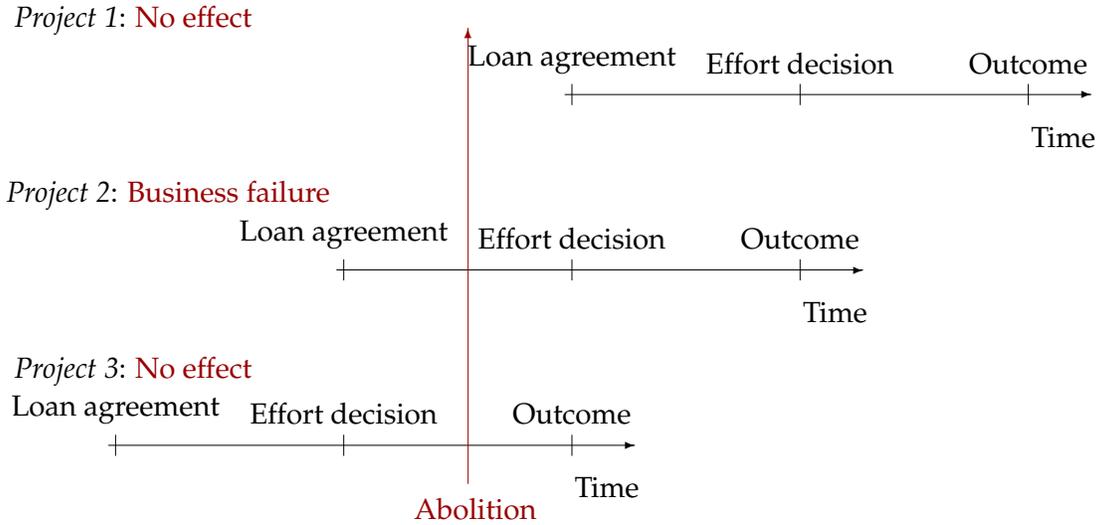
To study the effect of abolition on business exit, recall that a project in our model goes through three stages: the loan agreement stage, the entrepreneur's effort decision stage, and nature's move in determining business success. At the time of abolition of slavery, active businesses were in different stages. The loan agreement establishes how the lender and entrepreneur will share the project returns. This sharing rule is designed to guarantee that the entrepreneur will choose to exert effort. Using equation (1), we noted that an entrepreneur demands  $R_b \equiv \gamma B/p_H - C$  in order to exert effort. After abolition, however, the returns required by a slaveowner to exert effort increase to:

$$R'_b \equiv B/p_H - C > R_b \equiv \gamma B/p_H - C$$

when  $\gamma < 1$ . This happens because exerting effort is now more costly for a former slaveowner, as they can no longer use slaves to lower the cost of production. Note that since  $\gamma = 1$  for non-slaveowners, they require the same amount of returns before and after abolition.

The following figure shows entrepreneurs that faced abolition in three different stages. In Project 3, the entrepreneur promised the lender a portion  $R - R_b$  of the returns in case of success. This sharing rule satisfies the entrepreneur's incentive compatibility constraint, so he exerts effort. Because abolition was proclaimed after the effort decision, it does not affect the entrepreneur's incentives nor the project's success rate. In Project 2, the entrepreneur promised the lender a portion  $R - R_b$  of returns in

**Theory Figure 1.** *Abolition and business exit when the cost of production channel is active*



case of success which, at the time of the loan agreement, satisfied the entrepreneur's incentive compatibility constraint. However, since abolition was proclaimed before the effort decision, abolition affects the entrepreneur's incentives. Now the project's returns are insufficient to compensate effort and payment to the lender in case of success. As a consequence, the entrepreneur chooses not to exert effort and exits the market. Finally, Project 1 considers an entrepreneur that enters after abolition. Since the loan agreement is reached taking into account that any potential cost savings associated to the use of slaves are no longer available, abolition does not affect business exit of these entrepreneurs.

The following proposition summarizes this discussion:

**Proposition 3.**

- a) *If  $\bar{\gamma} < 1$  or  $\beta_{slaves} > \beta_{land}$ , abolition reduces the probability of business entry by a (former) slaveowner to the level of an equally wealthy non-slaveowner.*
- b) *If  $\bar{\gamma} < 1$ , abolition will make not exerting effort (and, hence, letting a business fail) a dominant strategy for a slaveowner that received abolition shock after receiving credit*

*approval but before making the effort decision.*

## **A.5 Discussion**

Our analysis thus far has ignored the effects of the Civil War on business entry and exit. The Civil War may have affected business projects in their cost of production ( $B$ ), success rate ( $p_H$ ), returns ( $R$ ), or any subset of these. However, we note that as long as changes in these variables affect slaveowners and non-slaveowners equally, our results on the effect of slave wealth on business entry and exit continue to hold regardless of the values that these variables may take.

Using equation (3), we note that the collateral requirement decreases in  $p_H$  and  $R$ , and it increases in  $B$ . These relationships help explain how changes in economic conditions during the Civil War (e.g. lower  $R$  or  $p_H$ ) could have affected rates of business entry before and after its beginning.

## **B Data Construction**

### **B.1 Mergers**

In order to carry out our empirical analysis we had to merge three different datasets: (1) entrepreneurs in Maryland, (2) the 1860 Maryland Census, and (3) the 1860 Slave Schedules. To accomplish this, we proceeded in two steps.

In the first step, we searched for 1,580 entrepreneurs in the 1860 Maryland Census using Ancestry.com. In particular, we searched for an individual's name, last name, and county of residency. A search was considered successful if there was a unique individual with the exact same three variables. When doing this we relaxed some obvious constraints. For example, if we were looking for "George Smith, Baltimore" and we found a unique "Geo Smith, Baltimore", we consider that to be a successful search. If the search was not successful, there were a couple of possibilities. In some cases, we

found more than one individual with the same name. For example, we could have found both “Geo Smith, Baltimore” and “George Smith, Baltimore”, or simply two “George Smith”. In that case we used our occupation variable to make an educated guess about which was more likely to be the individual we were looking for. However, this was generally not the case. If that strategy was not possible, either because it was not clear or occupation was not available, we coded that individual as “not found”. Finally, in the last set of cases, we simply did not find the individual in the Census. This could have happened if, for example, an individual arrived to Maryland after 1860, or his name was misspelled in the Mercantile Agency’s records. Overall, we found 620 entrepreneurs (approximately 40 percent). However, when we restrict attention to white males with age between 14 and 89 and complete information on covariates, we are left with 526 entrepreneurs.

In the second step, we merged our sample of 526 entrepreneurs and the 1% IPUMS sample of Maryland with the 1860 Slave Schedules in Maryland. In this case, we also used an algorithm that matched an individual’s name, last name, and county. Individuals were classified as slave owners if there was an individual with the exact same three variables in the Slave Schedules. Similarly as before, we relaxed names such as “Geo” to be the same as “George”, and “Wm” to be the same as “William”, among others. In addition, if we were looking for an individual, and we found two people in the Slave Schedules with the same name, which happened only a few times, we classified the individual as slave owner, and we assigned the average number of slaves of those two people to the individual we were looking for.

## **B.2 Subsamples**

To construct the subsample of individuals working in the agro-business or merchant/retail sector, we use the occupation information in the credit reports and in the IPUMS records. We classified individuals as working in the agro-business sector whenever the occupation information included “Agriculture”, “Farm products”, “Fish”, “Grain products”, “Logging”, “Wood”, “Tobacco”, “Yarn”, or “Farmer”. We classified individuals as being merchants or working in the retail sector when the occupation infor-

mation included “Grocery store” (or stores in general), “Fancy goods”, “Food”, “Jewelry”, “Dry goods”, “Shoes”, and other non-production categories.

### **B.3 Additional checks on the data**

A Congressional report on Bankruptcy reported that 59 Maryland businesses petitioned for bankruptcy in 1867, while our data shows that, out of those businesses started between 1860 and 1865, 28 businesses exited ([United States. Congress. State, 1874](#)). Our measure of exit is then plausible in magnitude. Additionally, [Carter and Savoca \(1990\)](#) estimate that average employment duration in 19th century America is 13 years. While the composition of the samples differs in significant way, their estimate is in line with our 8.25-year estimate of business duration in Maryland.

### **B.4 Slave transaction records**

We use data from [Fogel and Engerman \(1976b\)](#) in some empirical exercises. This data include 1,520 transactions that were completed in years between 1792 and 1864. These transaction records include the year and state of transaction. We also use New Orleans slave transaction data from [Calomiris and Pritchett \(2016\)](#) in this Appendix, which includes slave sales between 1856 and 1861, as well as state of origin of the buyer and seller, as well as a rich set of enslaved person characteristics, among other things.

## **C Additional Empirical Evidence**

### **C.1 Slave prices**

To provide evidence that slave wealth remained a relevant source of wealth throughout the Civil War, we study how slave prices changed during the years prior to abolition. To implement this analysis we make use of the slave transaction records discussed above ([Fogel and Engerman, 1976b](#)).

Table A.2 shows the evolution of the unconditional average transaction price from 1856 to 1864. The table shows that there is not a clear trend of declining prices. We repeat this exercise but for the conditional average transaction price. That is, we run a regression of log price on indicator variables for slave age, gender, state where transaction occurred, and years. We report the coefficients on year indicators in Figure A.1. As can be seen from the figure, there is no trend of declining prices until the very end of the Civil War.

## C.2 Slave rentals

To provide evidence that the slave rentals market remained active throughout the Civil War, we use data on slave rental rates from [Fogel and Engerman \(1976a\)](#). Unfortunately, the data for Maryland only include information for one county with no records after 1855. We use data from the neighboring state Virginia instead to analyze trends in the volume of slave rentals and monthly rental rates prior to abolition. To analyze the evolution of rental rates we regress log monthly rental rates on slave observables, county fixed effects, and year fixed effects.

Figure A.3 shows that the rental market for slave labor remained active until 1864 with a relatively stable demand for workers. The figure also shows no significant trend in the monthly rental rates of slaves, suggesting a stable labor market equilibrium despite the ongoing Civil War.

## D Additional Regression Results

### D.1 Functional forms

In all of our regression specifications we use a linear probability model to estimate the effect of slave wealth on business formation. Another alternative would be to use a different functional form when estimating this relationship. For example, a probit could have been used to fit similar models. One might worry about the impact of this func-

tional form assumption, which is essentially non-testable as it refers to the distribution of unobserved variables, on our estimated coefficients. This is typically an issue when dealing with binary dependent variables where the majority of observations are either a one or a zero.<sup>2</sup>

In Table A.3 we present estimated coefficients of our main regression equation but now using a probit model. Our main result is essentially unchanged, suggesting that our results do not rely on our particular choice of a linear probability model.

## D.2 Heterogeneity

In our last exercise, we explore the heterogeneity of our main result by place of birth and skill level, as measured by age. The upper panel of A.5 shows our main coefficient estimated in several sub-samples of individuals: (1) those born in Maryland, (2) in the U.S., (3) in the North, (4) in the South, and (5) individuals born outside the U.S. Point estimates are remarkably similar across sub-samples and maybe slightly larger for immigrants. As this group is arguably the one that will more likely benefit from liquid collateral because it is harder for lenders to obtain information about them, this result could be easily rationalized in our model.

The bottom panel of Figure A.5 shows our main coefficient estimated in different sub-samples of age. If skill is a non-linear function of age, as suggested by a large literature that estimates wage equations including both age and age squared into their main regressions, then this result could also be easily rationalized using our theoretical framework. The logic here is that when a supplier has to choose among two identical individuals that only differ by age, the higher skill individual is always preferred, being less likely to default on debts.

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<sup>2</sup>See Horowitz and Savin (2001) and King and Zeng (2001) for a discussion.

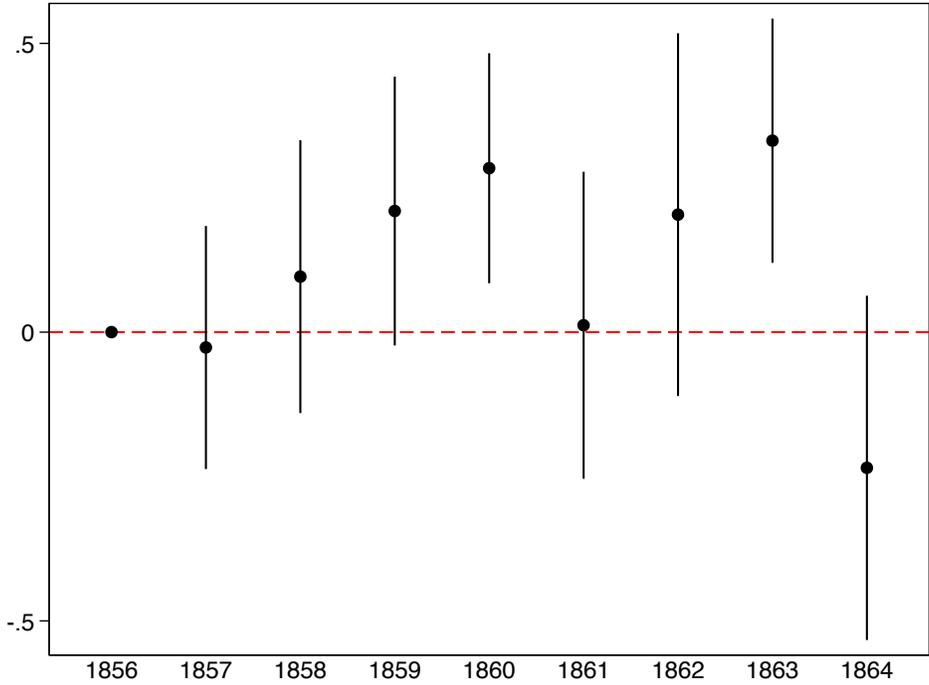
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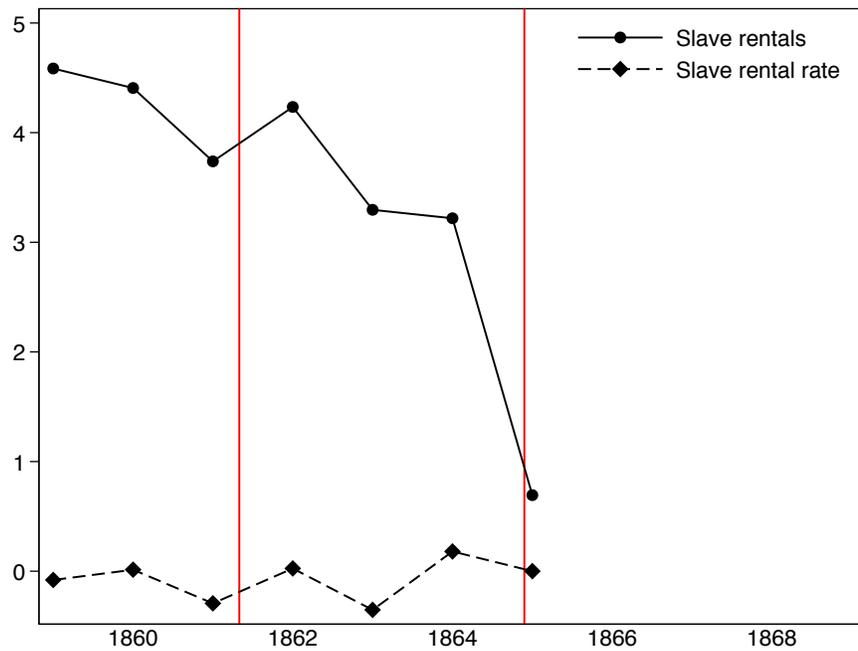
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**Figure A.1:** Logarithm of slave prices



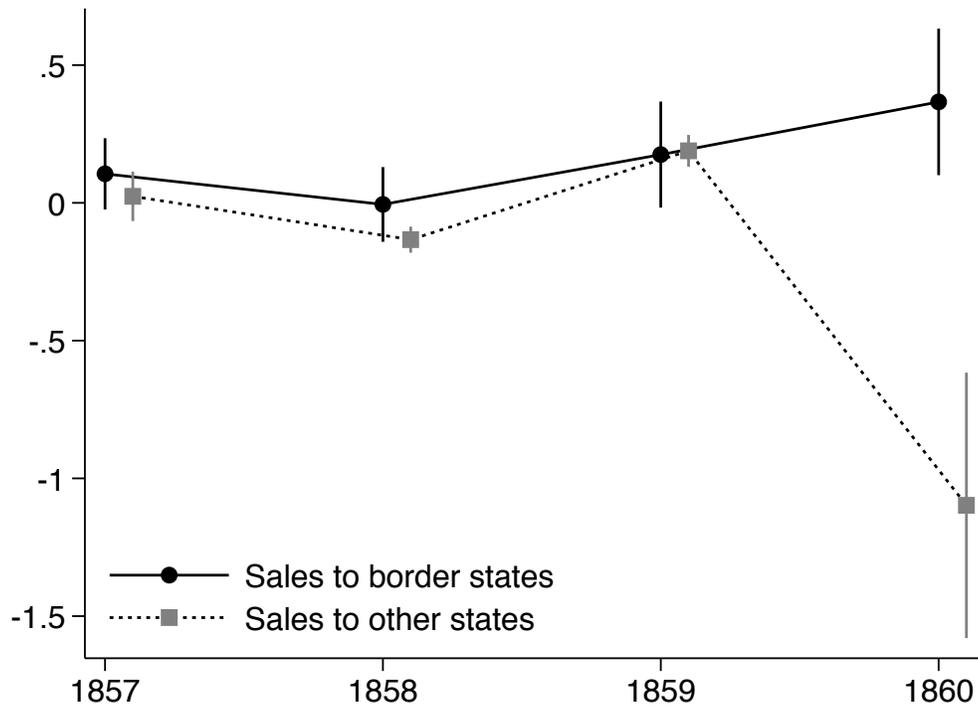
*Notes:* This figure plots the year fixed effects in a regression of logarithm of slave sale on gender, age, and state and year fixed effects.

**Figure A.2: Slave rentals**



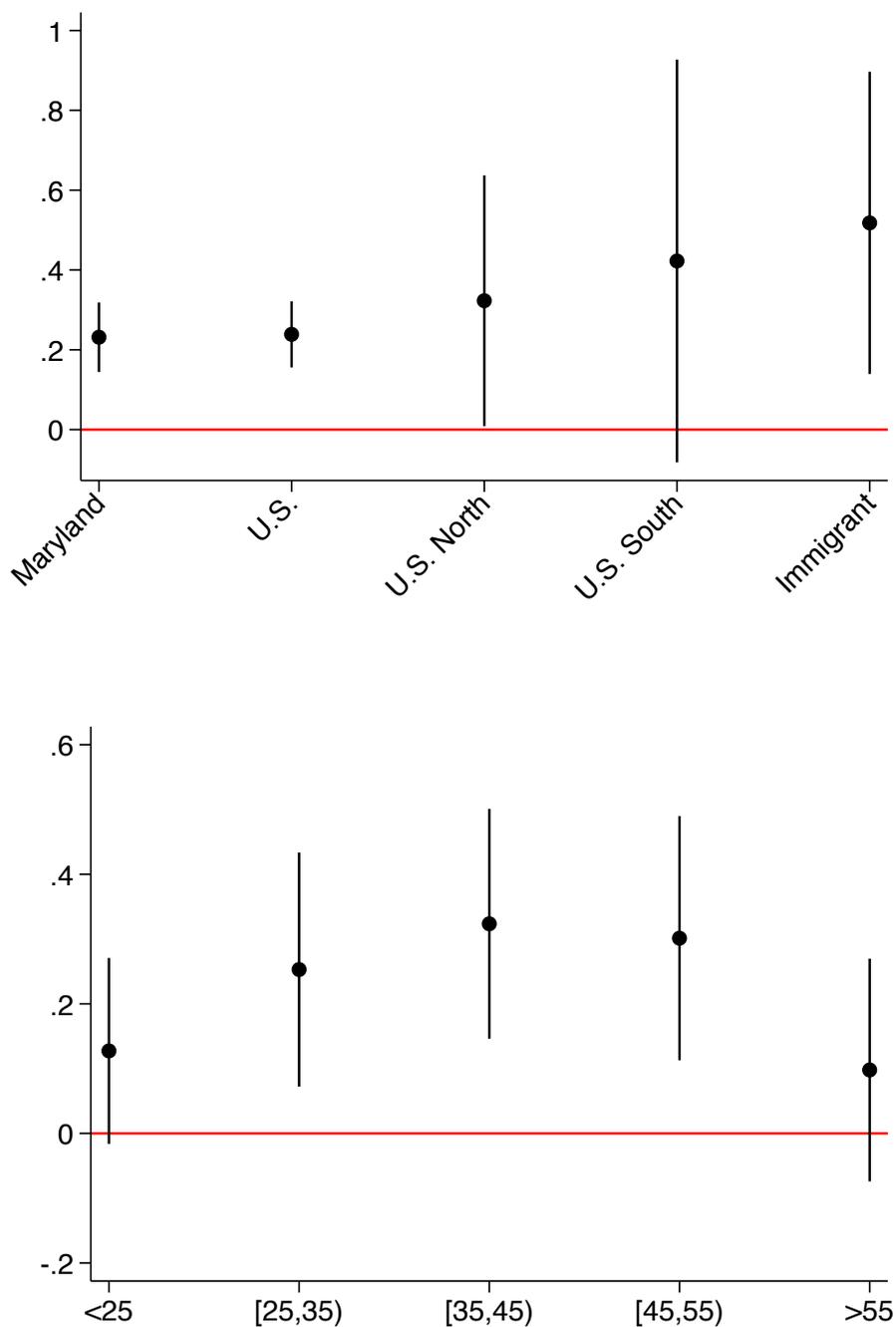
*Notes:* a) Slave rentals: We report the total number of slave rental transactions in Virginia for each year using data from [Fogel and Engerman \(1976a\)](#); b) Slave rental rate: We report coefficients on year fixed effects from a regression of log monthly rental rate in Virginia on gender, age, county, and year fixed effects using data from [Fogel and Engerman \(1976a\)](#).

**Figure A.3:** Slave prices in Calomiris and Pritchett (2016) data set



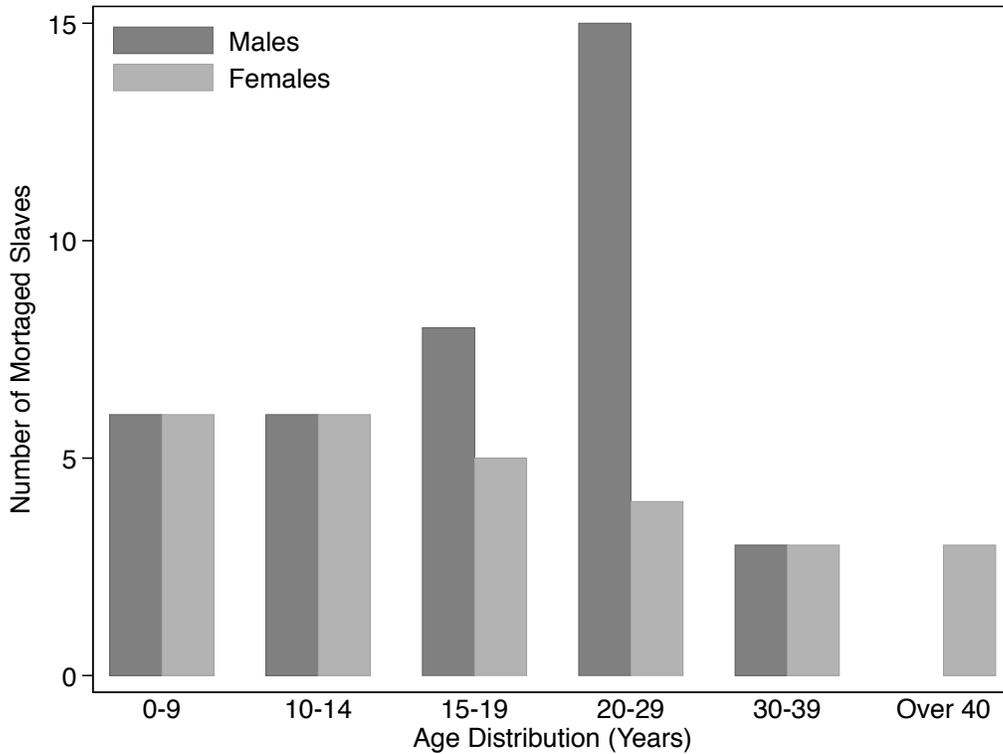
*Notes:* Data from Calomiris and Pritchett (2016). This figure shows year fixed-effect estimates from regressions of log price on observable characteristics of slaves and year fixed effects. The regression was estimated separately for border states and non-border states. Border states include Kentucky, Delaware, Missouri, and Maryland. Overall, these figures suggest that the willingness to pay for slaves was not lower in border states leading towards the Civil War.

Figure A.4: Heterogeneity Analysis



Notes: The upper panel shows the coefficient on slave wealth, using the specification in column 3 of Table 2 (indicator for slaveowner), by place of birth. The lower panel shows the same coefficient by age bin of individuals.

**Figure A.5:** An example of slaves mortgaged (reprinted from DePuydt 2013)



*Notes:* An example of private credit can be found in DePuydt (2013), which discusses the case of Outerbridge Horsey and John Lee, two Maryland slaveowners who, in 1828, mortgaged 65 of their slaves to the Linton household and Mr. Johnson in an effort to purchase a Louisiana sugar plantation. Horsey and Lee’s sugar ambitions did not survive, however, and the pair wound up mortgaging even more slaves to finance their losing operation. Surviving mortgage documents allow us to see the slaves mortgaged, and this figure shows the distribution by age and sex, and shows that prime age males formed the bulk of the collateral. In the end, Linton and Johnson successfully sued Horsey and Lee for the debts owed, which resulted in forced sales of the mortgaged slaves and purchased plantation by the court.

**Table A.1:** U.S. Census search – Comparison of observables

	Individuals <i>not found</i> in 1860 U.S. Census	Individuals <i>found</i> in 1860 U.S. Census	Difference ( <i>t</i> -stat)	Observations
Indicator for activity is available	0.715 (0.45)	0.719 (0.45)	-0.005 (0.02)	1,580
Indicator for last report is available	0.860 (0.347)	0.882 (0.323)	-0.022 (0.017)	1,580
Year of first report	1862.5 (2.1)	1862.6 (2.0)	-0.11 (0.11)	1,580
Year of last report	1869.9 (6.1)	1870.8 (5.2)	-0.90*** (0.32)	1,373
Indicator for Baltimore	0.791 (0.407)	0.797 (0.403)	-0.006 (0.021)	1,580

*Notes:* Individuals search using Ancestry records. A total of 620 individuals were found.

**Table A.2:** Logarithm of slave prices

	<u>Mean</u>	<u>Observations</u>
1856	6.6	67
1857	6.7	79
1858	6.6	52
1859	6.9	82
1860	6.9	92
1861	6.5	51
1862	6.5	25
1863	7.0	78
1864	6.1	24
1865	–	–
Total	6.7	550

*Notes:* Own construction from [Fogel and Engerman \(1976b\)](#).

**Table A.3:** Alternative regression functional form*Dependent variable is an indicator for first report before abolition of slavery*

	<i>All</i>			<i>Baltimore</i>	<i>Non-agri</i>	<i>Merchants</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A</b>						
Slaveowner	0.259*** (0.044)	0.232*** (0.046)	0.270*** (0.049)	0.246*** (0.079)	0.346*** (0.060)	0.434*** (0.079)
<b>Panel B</b>						
Log slave wealth	0.023*** (0.004)	0.020*** (0.004)	0.022*** (0.003)	0.026*** (0.008)	0.031*** (0.005)	0.052*** (0.011)
<b>Panel C</b>						
Fraction slave wealth	0.123*** (0.036)	0.155*** (0.035)	0.180*** (0.033)	0.214*** (0.079)	0.261*** (0.046)	0.460*** (0.120)
Flexible wealth controls	No	Yes	Yes	Yes	Yes	Yes
Human capital controls	No	No	Yes	Yes	Yes	Yes
Baltimore	No	No	Yes	No	Yes	Yes
Individuals	2,080	2,080	2,080	1,109	1,663	493

*Notes:* Marginal effects from probit regressions. Flexible wealth controls include the logarithm of real estate wealth and indicators for the following categories: wealth  $\in [200, 1700]$  (50th and 75th percentile of the empirical distribution), wealth  $\in [1700, 10000]$  (75th and 90th percentile), and wealth  $> 10000$  (the omitted category is wealth  $\in [0, 200]$ ). Human capital controls include an indicator variable for illiterate individuals, age, and age squared. Standard errors are reported in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.4: Intensive margin in subsamples***Dependent variable is an indicator for first report before/after abolition of slavery*

	<i>Baltimore</i>	<i>Non-agri</i>	<i>Merchants</i>	<i>Baltimore</i>	<i>Non-agri</i>	<i>Merchants</i>
	(1)	(2)	(3)	(4)	(5)	(6)
<b>Panel A: Before</b>						
Log slave wealth	0.029*** (0.009)	0.036*** (0.006)	0.046*** (0.009)			
Fraction slave wealth				0.230** (0.108)	0.289*** (0.066)	0.435*** (0.122)
<b>Panel B: After</b>						
Log slave wealth	0.012 (0.008)	0.006 (0.005)	-0.009 (0.007)			
Fraction slave wealth				0.191** (0.094)	0.098** (0.047)	-0.025 (0.075)
<b>Panel C</b>						
Diff-in-diff	0.017 (0.015)	0.030*** (0.010)	0.055*** (0.014)	0.039 (0.179)	0.191** (0.095)	0.460*** (0.165)
Flexible wealth controls	Yes	Yes	Yes	Yes	Yes	Yes
Human capital controls	Yes	Yes	Yes	Yes	Yes	Yes
Baltimore	No	Yes	Yes	No	Yes	Yes
Individuals	1,109	1,663	493	1,109	1,663	493

*Notes:* Flexible wealth controls include the logarithm of real estate wealth and indicators for the following categories: wealth  $\in [200, 1700]$  (50th and 75th percentile of the empirical distribution), wealth  $\in [1700, 10000]$  (75th and 90th percentile), and wealth  $> 10000$  (the omitted category is wealth  $\in [0, 200]$ ). Human capital controls include an indicator variable for illiterate individuals, age, and age squared. Robust standard errors are reported in parentheses (bootstrapped for diff-in-diff estimates). Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.5: Individuals in Maryland in 1870**

	Indicator slaveowner	Log slave wealth	Fraction slave wealth
	(1)	(2)	(3)
<b>Entry <i>before</i> abolition</b>			
Slave wealth	0.148* (0.086)	0.015 (0.010)	0.083 (0.088)
<b>Entry <i>after</i> abolition</b>			
Slave wealth	-0.011 (0.051)	-0.000 (0.006)	0.021 (0.055)
<b>Diff-in-diff</b>			
Diff-in-diff	0.159 (0.108)	0.015 (0.013)	0.062 (0.111)
<i>p-value</i>	0.14	0.25	0.58
Flexible wealth controls	Yes	Yes	Yes
Human capital controls	Yes	Yes	Yes
Baltimore	Yes	Yes	Yes
Observations	294	294	294

*Notes:* Flexible wealth controls include the logarithm of real estate wealth and indicators for the following categories: wealth  $\in [200, 1700]$  (50th and 75th percentile of the empirical distribution), wealth  $\in [1700, 10000]$  (75th and 90th percentile), and wealth  $> 10000$  (the omitted category is wealth  $\in [0, 200]$ ). Human capital controls include an indicator variable for illiterate individuals, age, and age squared. Robust standard errors are reported in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.6: Individuals in Maryland in 1870 – Civil War***Dependent variable is an indicator for entry before/during/after the Civil War*

	<i>Before</i>	<i>During</i>	<i>After</i>	<i>Diff-in-diff</i>		
	<i>Civil War</i>	<i>Civil War</i>	<i>Civil War</i>	(1)-(2)	(1)-(3)	(2)-(3)
	(1)	(2)	(3)			
Slave wealth	-0.005 (0.056)	0.153** (0.075)	-0.011 (0.048)	-0.158 (0.103)	0.006 (0.079)	0.164 (0.105)
<i>p-value</i>				0.13	0.94	0.12
Flexible wealth controls	Yes	Yes	Yes	Yes	Yes	Yes
Human capital controls	Yes	Yes	Yes	Yes	Yes	Yes
Baltimore	Yes	Yes	Yes	Yes	Yes	Yes
Observations	294	294	294	294	294	294

*Notes:* Slave wealth is an indicator for slaveowners in 1860. Flexible wealth controls include the logarithm of real estate wealth and indicators for the following categories: wealth  $\in [200, 1700]$  (50th and 75th percentile of the empirical distribution), wealth  $\in [1700, 10000]$  (75th and 90th percentile), and wealth  $> 10000$  (the omitted category is wealth  $\in [0, 200]$ ). Human capital controls include an indicator variable for illiterate individuals, age, and age squared. Robust standard errors are reported in parentheses (bootstrapped for diff-in-diff estimates). Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .

**Table A.7: Slave wealth and exit after Abolition***Dependent variable is an indicator for last report on 1864 or 1865*

	<i>All</i>			<i>Baltimore</i>	<i>Non-agri</i>	<i>Merchants</i>	<i>MD 1870</i>
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
<b>Panel A</b>							
Slaveowner	0.024 (0.061)	0.038 (0.062)	0.030 (0.064)	0.078 (0.085)	0.033 (0.068)	0.059 (0.086)	-0.003 (0.033)
<b>Panel B</b>							
Log slave wealth	0.003 (0.008)	0.004 (0.008)	0.003 (0.008)	0.010 (0.011)	0.004 (0.008)	0.008 (0.011)	0.000 (0.004)
<b>Panel C</b>							
Fraction slave wealth	-0.033 (0.077)	-0.045 (0.077)	-0.022 (0.082)	0.043 (0.127)	-0.019 (0.087)	-0.015 (0.117)	0.041 (0.056)
Flexible wealth control	No	Yes	Yes	Yes	Yes	Yes	Yes
Human capital controls	No	No	Yes	Yes	Yes	Yes	Yes
Baltimore	No	No	Yes	No	Yes	Yes	Yes
Observations	281	281	281	218	271	140	36

*Notes:* MD 1870 is an indicator for individuals living Maryland in 1870. Flexible wealth controls include the logarithm of real estate wealth and indicators for the following categories: wealth  $\in [200, 1700]$  (50th and 75th percentile of the empirical distribution), wealth  $\in [1700, 10000]$  (75th and 90th percentile), and wealth  $> 10000$  (the omitted category is wealth  $\in [0, 200]$ ). Human capital controls include an indicator variable for illiterate individuals, age, and age squared. Robust standard errors are reported in parentheses. Significance level: \*\*\*  $p < 0.01$ , \*\*  $p < 0.05$ , \*  $p < 0.1$ .