Appendix

Additional details regarding the sample of slave sales used in this article are presented in this Appendix. A comparison of our sample with the Robert W. Fogel and Stanley Engerman (1976) sample indicates that Fogel and Engerman sampled a smaller fraction of the notarial records than was previously stated in their study description and that this bias may have caused researchers to underestimate the total number of slaves sold in New Orleans. In addition, we discuss the market value of the certificates of good character and what effect these certificates may have had on our estimates of adverse selection. In Appendix Table 1, we present empirical estimates of price changes using different definitions for slave traders.

Estimating the Number of Slave Sales in New Orleans

Some New Orleans slaves were sold quite frequently whereas others had not been sold in years. For those invoices which list the previous purchase date, the average number of days since the previous sale was 446 days, the median was 84 days, and the mode was one day. More than half of these local slaves had been previously sold during the past eight months. The frequency of resale for local slaves is illustrated in Appendix Figure 1. The rapid turnover of the ownership of these slaves has a number of implications for previous research. Because some slaves were sold more than once, estimates of the total number of sales will overestimate the total number of slaves actually sold in the market. In addition, Fogel and Engerman (1974, p. 53) estimate that only 25 percent of the slaves sold in New Orleans originated from the exporting areas of the South. Because many local slaves were recently imported from outside of Louisiana, Fogel and Engerman underestimate the relative importance of the interregional slave trade.

The Notarial Archives and the Register of Conveyances are the two main sources of information on antebellum slave sales in New Orleans (See http://www.notarialarchives.org/). Fogel and Engerman (1976) used both data sources to draw their sample of slave sales for the years 1804 to 1862. According to the study description, they sampled 2.5 percent or 5 percent of all extant records for 1804 to 1862 depending on the specific year, and sampled 5 percent of the records for the year 1830 (Fogel and Engerman 1976, p. i). In a private communication from Engerman (dated 9/4/1986), he writes that "the sampling procedure was to use the annual list of transactions..." (presumably derived from the Register of Conveyances) "to draw the sample, and then use the notary's name to get the full invoice." In other words, Fogel and Engerman's sample is a percentage of the total number of transactions rather than the total number of slaves sold during these years. Using their data set, we find that Fogel and Engerman sampled 96 transactions (and a corresponding total of 164 slaves) for the 1830 calendar year. Based on their 5 percent sampling fraction, we project 1920 transactions occurred in New Orleans during this year.

As discussed in the article, our data include all extant notarial records for slaves sold in New Orleans during 1830. Because some notarial records were lost in office fires or simply misplaced, the data set underestimates the total number of slave slaves

¹ For time period 1804 to 1862, Kotlikoff (1979, p. 497) estimates that "more than 135,000 slaves were sold in New Orleans." As discussed in the text, much of the rapid turnover of slaves can be attributed to the presence of professional traders in the market.

APPENDIX TABLE 1
SENSITIVITY ANALYSIS: PERCENTAGE CHANGE IN PRICE FOR SEQUENTIAL SALES MATCHED RECORDS FOR SLAVES SOLD IN NEW ORLEANS DURING 1830

Sample		N	Mean Percentage	Trimmed Mean
Traders with 20+ Transactions	Treatment group: Slaves purchased and resold by non-traders	190	7.1* (1.5)	6.4* (1.3)
	Control group: Slaves purchased and resold by traders	378	4.4* (1.0)	4.4* (0.8)
	Difference in Differences		2.7 (1.8)	2.0 (1.0)
Traders with 5+ Transactions	Treatment group: Slaves purchased and resold by non-traders	109	4.0* (1.9)	4.2* (1.7)
	Control group: Slaves purchased and resold by traders	459	5.6* (0.9)	5.3* (0.8)
	Difference in Differences		-1.6 (2.1)	-1.1 (1.0)

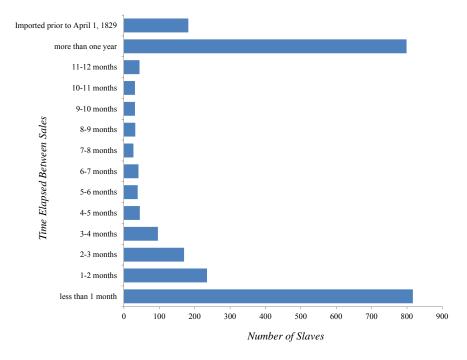
^{*} Statistically different than zero at the 5 percent level.

Notes: Prices deflated by the average monthly price of unskilled males, aged 18 to 30 years and fully guaranteed. The percentage change equals the difference between the initial and subsequent sale prices expressed in natural logarithms (and multiplied by 100). Standard errors of means are listed in parentheses. Note that if the treated slaves were adversely selected for resale, then their percentage price change should be less than the percentage price change for the slaves in the control group and that the difference in differences calculation should be negative.

Source: New Orleans Notarial Archives.

for this year. Despite these omissions, the data set includes the records of 2,834 slave sales for 1830 which suggests that Fogel and Engerman sampled a smaller fraction of the total number of transactions. Instead of a 5 percent sample, we find that Fogel and Engerman sampled less than 3.4 percent of the records for this particular year.

In addition to sampling fewer transactions, Fogel and Engerman also sampled smaller transactions. Using their sample, we calculate an average of 1.54 slaves per transaction for 1830 whereas we find an average of 2.20 slaves per transaction using our data. To be sure, the smaller-sized transactions recorded by Fogel and Engerman may simply reflect happenstance rather than a systematic bias. Because Fogel and Engerman's sample (for 1830) represents a subset of our data, we randomly draw 1,000 samples (without replacement) from these data in order to calculate the likelihood of Fogel and Engerman drawing a sample with such small transaction sizes. We find that approximately 10 percent of the samples created by this simple Monte Carlo experiment had an average transaction size of 1.54 slaves or less, which suggests that the small-sized transactions sampled by Fogel and Engerman may have been simply caused by chance rather than indicating a systematic bias.



APPENDIX FIGURE 1
FREQUENCY OF RESALE FOR NEW ORLEANS SLAVES

Sources: New Orleans Notarial Archives.

The combined effect of sampling fewer and smaller transactions substantially reduces the total number of slaves included in the Fogel and Engerman data set. Using the 5 percent fraction used by Fogel and Engerman, we project that 3,280 slaves would have been sold in New Orleans during 1830. We find evidence that at least 6,174 slaves were sold in New Orleans, which is nearly 90 percent more than projected. Laurence J. Kotlikoff (1979, p. 497) relies on Fogel and Engerman's sample when he estimates that "more than 135,000 slaves" were sold in New Orleans over the period 1804–1862. Due to under sampling, our evidence suggests that many more slaves may have been sold during these years.

The Market Value of a Certificate

By passing the 1829 law, the Louisiana legislature sought to prevent the importation of slaves who might instigate insurrections within the state. From the viewpoint of the slave-owning public, the introduction of criminal or immoral slaves creates a negative externality, because owners did not bear the full cost of their slaves' rebellious behavior. By requiring the certificate, the legislature hoped that traders would deal in slaves with "good moral character," which other things equal, would have increased their value when sold in New Orleans.

In addition to discouraging the introduction of rebellious slaves, the certificate of good moral character may have served as an indication of the slave's quality.² Because the certificate was deposited with the notary when the slave was first sold in Louisiana, its absence when the slave was subsequently resold may have lowered the resale price. Consequently, a decrease in the resale price of imported slaves might be attributed to the absence of the certificate rather than providing evidence of adverse selection. As demonstrated in the article, however, prices rose on average between initial purchase and subsequent resale, which is not consistent with either hypothesis. In other words, any possible bias created by the certificates works against our hypothesis, because it tends to increase the likelihood of observing a price decrease. As argued previously, if buyers thought that resold slaves were adversely selected for sale, they would have shaved their bids for them.

Sensitivity Analysis of Definitions of Slave Traders

The classification of sellers as professional slave traders is problematic at best. The notarial invoices rarely list the occupations of buyers or sellers (or slaves for that matter). In addition, the vast majority of New Orleans slave sellers are not mentioned in the secondary literature on the slave trade. We believe that slave sellers developed business reputations by engaging in prior transactions. Consequently, we classify sellers as traders based on the frequency of slave sales.

Although over a thousand individuals sold slaves in New Orleans during 1830, only a fraction of these sellers should be classified as professional slave traders. If we restrict our definition of a slave trader to those sellers who engaged in 20 or more transactions within the year, then only 22 New Orleans sellers would be classified as slave traders. Indeed, many of these sellers are well-known slave traders and accounted for two-thirds of the slaves sold in our sample. (We also believe that this definition would exclude a number of smaller sellers who were probably slave traders.) Using this restrictive definition, we find that the prices of slaves sold by non-traders increased 7.1 percent whereas the prices for slaves sold by traders increase on average by 4.4 percent (see Appendix Table 1). The difference in differences calculation is positive and not statistically different from zero, which is contrary to the predicted effects for adverse selection.

Alternatively, we can define a slave trader as a seller who engaged in five or more transactions within the year. Using this definition, more than 105 New Orleans sellers would be classified as professional traders, including some sellers who clearly were not traders. For example, many executors of estates would be classified as slave traders using this definition. For this more inclusive definition of a trader, the prices of slaves sold by non-traders increased 4 percent whereas the prices for slaves sold by traders increased on average by 5.6 percent. The difference in differences calculation is -1.6 percent, which is consistent with the predicted effects for adverse selection. Note, however, that the magnitude is quite small and not statistically different from zero.

² The certificate did not constitute a legally enforceable guarantee of the slave's good character and could not be used as evidence in a court of law. See Louisiana, 1829, section 1.

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