

A “Dreadful” Maternity & Infancy: Enslaved Americans on the Eve of the Civil War

Much remains to be learned about the material conditions of slave life in the US South in the decades before the Civil War.¹ In a series of provocative papers, Steckel (1986a,b,c) presented the slaves of the antebellum South as a "peculiar population," experiencing "dreadful" material conditions from conception until later childhood, with survivors becoming highly productive and well-nourished workers.² Of particular interest for our purposes here, Steckel's research "places the infant mortality rate in the neighborhood of 350 per thousand and total losses before the end of the first year (stillbirths plus infant deaths) at nearly 50%" (Steckel 1986c, p. 427).

Steckel's characterization of dreadful maternal and infant conditions for slaves in the antebellum South points to the proposition that births and infant survivals among the enslaved were skewed toward females. The simple testable implication is that the American slave population would exhibit low infant sex ratios -- most notably, below those of the white population of the antebellum South. And that implication is dramatically confirmed by evidence from the US census. Table ABS-1 presents the under-5 sex ratios for enslaved black and free white populations in the South in 1860; we rely on the SR5 because of male-biased age-heaping toward age one. For clarity, the table uses the terminology of the 1860 census for the relevant populations: "Slave" and "White". The key simple result is the dramatically lower child sex ratio among the Slaves, compared to the Whites. For the South as a whole, the Slave SR5 was just 97.3 -- a striking 7.1 percentage points below the White SR5. With a value of 104.4, the White SR5 was about typical of a healthy and prosperous rural population of the nineteenth-century. The low value of the Slave SR5 is only a little above the levels observed in some of the most miserable populations in the nineteenth century, such as Bengal India in 1881 with an SR5 of 93.9 or the black population of Cape Good Hope in 1891 with an SR5 of just 94.0.³

Table ABS-1: Under-5 Sex Ratios in the South in 1860

	South	Slave South	Non-slave
Slave	97.3	96.8	99.0
White	104.4	104.9	104.3

source: county-level data from the 1860 US census ([ICPSR 3 #8](#)).

-
- 1 Fogel and Engerman (1974) and subsequent scholars demonstrated that slaves worked hard (too hard), fueled by a high caloric intake. Such range of questions about the material conditions of slave life, and about how the system worked (and where, and when). And productivity findings had no necessary implications for interpreting the fact of natural increase among the US slave population (natural increase which stands in marked contrast to the experience of the much greater number of slaves consumed in the sugar plantation complex of the Caribbean and Brazil.
 - 2 Steckel assembles an elaborate chain of theory and evidence, with the key data being measures of children's heights in ships manifests -- data collected in relation to preventing smuggling of slaves after the closing of the US to the Atlantic slave trade (1986b:740). The manifest data indicate that slave children were tiny in stature; from that fact, Steckel infers low birth-weights, from which he extrapolates to high infant and fetal mortality, with attention to a range of scholarship on slavery in the antebellum South. Critics of Steckel's view have challenged various aspects of the argument. Even the "fact" of tiny (short) slave children on coastwise ships can be doubted, for one wonders whether much attention was paid to measuring the length of a slave child carried in their mother's arms. We mention this point to acknowledge there are strong *a priori* grounds for doubting Steckel's view.
 - 3 We would not be surprised if the somewhat lower SR5 values seen in places like Bengal or Cape Good Hope reflected relatively higher mortality at ages 2, 3, and 4 compared to southern slaves. We suspect that both disease and malnutrition afflicted those non-US populations more than they affected US slave children.

Table ABS-1 also presents a simple geographic breakdown of the child-sex-ratio results, in case the low child sex ratio of the slave population reflected a generally unhealthy conditions in the areas where slaves were concentrated. It could have been that child sex ratios for both slaves and whites were low in the areas with concentrations of slave population (such as the coastal lowlands of South Carolina and Georgia, and the Mississippi Delta), with the higher level of the SR5 among whites reflecting the concentration of that population in healthier areas (where the SR5 would be higher for both whites and slaves).⁴ However, controlling for geography only strengthens the contrast between the child sex ratios for whites and slaves. Restricting attention to the “slave South” -- comprised of counties where the share of slaves in population exceeded the southern average in 1860 -- the slave/white SR5 gap increases by one percentage point.⁵ In the slave South, the SR5 for slaves was just 96.8, while that for whites was 104.9.⁶ In the rest of the South (the non-slave South in Table ABS-1), the gap between the slave and white sex ratios was narrower, reflecting a slight improvement in the slave SR5, to 99.0 and a slight deterioration in the white SR5, to 104.3.

Table ABS-2 presents the same set of sex-ratios for the census year 1850. The results are virtually the same as those for 1860. Again the key finding is that within the slave South, the under-5 sex ratio for the slave population was starkly lower than that for the white population -- 97.3 versus 104.9. Again we see sex ratios for white children consistent with a prosperous and healthy population (ranging from 104.2 to 104.9), and sex ratios for slave children suggestive of maternal and infant misery.

Table ABS-2: Under-5 Sex Ratios in the South in 1850

	South	Slave South	Non-slave
Slave	97.7	97.3	99.0
White	104.4	104.9	104.2

source: county-level data from the 1850 US census ([ICPSR 3 #7](#)).

In both 1850 and 1860, there is evidence of slightly better maternal and infant health for the slaves living outside the slave South (about 1/4 of the slaves), with the SR5 values roughly 2 percentage points higher. It might be interesting to speculate about reasons for somewhat less dreadful conditions outside the slave South, but the key for our purposes is that the sex ratio evidence from both 1850 and 1860 provide simple and dramatic evidence that strongly corroborate Steckel’s characterizations of miserable (or “dreadful”) living conditions for the enslaved mothers and infants of the antebellum US.

4 The hypothesized pattern is reminiscent of 18th-century demographic patterns in the Caribbean compared to British North America: with the former characterized by high mortality and low fertility for both slaves and whites, and the latter having low mortality and high fertility for both groups (a point emphasized by Stanley Engerman when teaching economic history at the University of Rochester in the early 1980s; see also Eltis (1983:279)).

5 The slave South included about 3/4 of the slaves and 1/3 of the whites of the 15 US states with legal slavery in 1860.

6 We interpret the slightly higher white SR5 in the slave South, versus the non-slave South, as a reflection of the relatively higher incomes and living standards for the whites there, based on their exploitation of slave workers who were forced to high levels of production.

Appendix ABS-1: Male-biased age-heaping among Slave Populations in the US Census

In our view, both the 1850 and 1860 census count of slave infants and children exhibit male-biased age-heaping toward age one. Tables ABS-3 and ABS-4 present the available data, from the census compilations (recorded in the ICPSR datasets). Male-biased age heaping is most evident for the slaves of the slave South, where the SR0 was 3.9 percentage points below the SR1to4. Such age-heaping is not evident among the white populations of the South in 1860. Pooling the under-age-one and age 1 to 4 groups leaves us with a consistent and informative set of child sex ratios.

Table ABS-3: Infant and Child Sex Ratios; the South in 1860

	South	Slave South	Non-slave
Slaves			
SR0	94.6	93.6	97.8
SR1to4	97.9	97.5	99.2
SR5	97.3	96.8	99.0
Whites			
SR0	104.5	105.0	104.2
SR1to4	104.4	104.8	104.3
SR5	104.4	104.9	104.3

source: county-level data from the 1860 US census ([ICPSR 3 #8](#)).

A similar pattern is evident in 1850, with the most severe distortion occurring among slave children in the slave South (with the SR1to4 almost 4 percentage-points above the SR0).

Table ABS-4: Infant and Child Sex Ratios; the South in 1850

	South	Slave South	Non-slave
Slaves			
SR0	95.4	94.1	98.9
SR1to4	98.1	97.8	99.0
SR5	97.7	97.3	99.0
Whites			
SR0	104.7	104.4	104.8
SR1to4	104.4	104.9	104.1
SR5	104.4	104.9	104.2

source: county-level data from the 1850 US census ([ICPSR 3 #7](#)).

References

Eltis, David (1983), "Free and Coerced Transatlantic Comparisons: Some Comparisons." *The American Historical Review* 88:251-80.

Fogel, Robert W. and Stanley L. Engerman (1974), *Time on the Cross*.

Steckel, Richard H. (1986a), "Birth Weights and Infant Mortality among American Slaves," *Explorations in Economic History*, 23:173-98.

_____ (1986b), "A Peculiar Population: The Nutrition, Health, and Mortality of American Slaves from Childhood to Maturity," *The Journal of Economic History*, 46:721-42.

_____ (1986c), "A Dreadful Childhood: The Excess Mortality of American Slaves," *Social Science History*, 10:427-65.