

# Democracy, Genes, and the Male Survival Disadvantage

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## Abstract

Boys have a survival disadvantage in most societies. This paper examines whether and how improvement in the quality of democratic institutions affects sex differences in infant mortality. Using data on more than 3 million births from sub-Saharan African countries, our identification strategy exploits within-mother variation in the quality of institutions. The main finding demonstrates that the male survival disadvantage in infant mortality falls by 0.31 percentage points, 20% of the sample mean, when we move from autocracy to democracy. Analyzing the channels through which this effect operates, we find that better democratic institutions expand the likelihood of tetanus immunization, access to prenatal care services, breastfeeding practices, and normal birth weight, all of which are associated with stronger health benefits for boys than for girls. Moreover, using twins, we find that better democratic institutions significantly constrain genetic influences on male mortality in early ages. We empirically reject the hypothesis that hormonal (testosterone) transfer could be driving our findings.

**Keywords:** Infant mortality, Democratic institutions, Male survival disadvantage, Genes, Preconception environment, Hormonal transfer.

**JEL:** I12, I14, I15, I18, J13, J16, J18, O15.

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