

Past research has tested the quantity-quality model of fertility by studying a shock to quantity, typically by exploiting the birth of twins or China's one-child policy. We take an alternative approach and study the effect of a quality shock on the QQ trade-off, which we conceptualize as the birth of a child with an extreme level of the intellectual endowment. Theory predicts that a rise in child endowment increases parental demand for children through an increase in family income and a decline in the shadow price of children. The opposite is true for a fall in child endowment. Using two quasi-experiments, we test these predictions and estimate the reduced-form effect of a positive or negative change in endowment on family size. The first experiment estimates the effect of a first-born high-endowment child on further fertility in a sample including families with either a first- or second-born high-endowment child and at least two children. Similarly, we estimate the effect of a second-born high-endowment child on further fertility in a sample including families with either a second or third-born high-endowment child and at least three children. We use Israeli data on families and their children and measure high endowment by giftedness or exceptional scores on early cognitive tests. We find that the birth of a high-endowment child increases the probability of an additional child in both quasi-experiments. In addition, as the information on child endowment becomes noisier, parents' ability to recognize the endowment is a condition for its effect. On the other hand, the birth of a low-endowment child, measured as enrolment in a special-education class, negatively affects family size in both quasi-experiments. However, this effect is smaller and less significant in the first experiment, estimating the effect of a first-born low-endowment child. This last result is consistent with families' preference for a child with a regular endowment, which offsets the negative income and price effects activated by a low-endowment child. Overall, our results point to child endowment as an important factor affecting fertility choice.