

Note 1. Relationship between household size and affluence. We find this relationship in a regression of the log of household size on the log of GDP per capita and the square of the log of GDP per capita using the data described below. This regression yields an R^2 of 0.612 ($F_{2,106} = 86.19, P < 0.0001$).

Note 2. Evidence for the robustness of estimation results presented. Huber/White and bootstrapped (2000 repetitions) bias corrected and percentile estimates yielded the same substantive results as those reported in Table 1, as did median regression with bootstrapped standard errors. The consistency across these procedures suggests that the results are not an artifact of the assumptions underpinning the particular models estimated. Variance inflation factors indicated no substantial collinearity (ie a linear relationship among some or all of the independent variables in a regression model) except between log GDP and its square. Leverage diagnostics indicate no countries with a dominating influence on the results. The education and life expectancy indices exhibit only moderate collinearity with other variables in the model (variance inflation factors of 2.95 and 4.25, respectively). In a model not including the linear and quadratic terms for GDP but retaining the other drivers, neither quality of life index is significant. (For the life expectancy index, elasticity is 0.046, $t_{127} = 0.25, P = 0.80$. For the education index, elasticity is 0.030, $t_{127} = 0.19, P = 0.85$.)

Note 3. Ecological intensity is calculated as the anti-log of the residual from the regression of the STIRPAT model. Its exact value will depend on the driving force variables included in the model. The results reported in Figure 3 are for model c. The increases in efficiency we discussed in the context of our projections could be achieved by changes in technology, institutions, or behavior that would be reflected in a changed ecological intensity of a nation, by changes in the driving forces, by changes in the elasticities associated with the driving forces, or by a combination of all three.