Religiosity and Science: An Oxymoron? Evidence from the Great Influenza Epidemic

Mara SQUICCIARINI, Enrico BERKES, Davide COLUCCIA, and Gaia DOSSI

Abstract:

This paper studies the impact of the Spanish influenza pandemic (1918-20) on religiosity and science. Focusing on the United States during the 1900-1930 period, we define a novel indicator of revealed religiosity that leverages naming patterns of newborn babies, and measure scientific progress through the universe of patents granted over this period. Exploiting plausibly exogenous variation in exposure to the pandemic, we find that relatively more affected counties became both more religious and more innovative. Moreover, we document that the relationship between religiosity and science changed over time, being negative before 1918, and positive thereafter, a finding at odds with the current literature. We use individual-level data to shed light on the mechanisms. We show that in counties affected by the pandemic: i) individuals in science-related fields, who were less religious before the shock, became even less religious than the rest of the population; ii) pre-existing differences in religiosity increased, leading to a polarization of religious beliefs.