The fertility-development relationship in the United States: New evidence from threshold regression analysis

Abstract

This study employed a threshold regression analysis (Hansen, 2000) to examine the relationship between per capita Gross Domestic Product (GDP) and total fertility rate (TFR) in the United States. The United States is the only developed country where the declining fertility rate was reversed and recovered to the replacement level of 2.1. The findings indicate that there was a statistically significant threshold in the fertility-development relationship and a reverse in the fertility decline. The threshold value of real per capita GDP based on the Laspeyres index was US\$22,267, while the threshold value of real capita GDP based on the Fisher index was US\$21,264. This means that the decline in the fertility rate could be reversed when per capita income reached US\$21,000-US\$22,000. The empirical findings also indicate a significant negative relationship between per capita GDP and TFR when income level in the country was below the threshold value. This negative association between the two variables reversed to a positive relationship when income level had exceeded the threshold value. The findings of this study confirm the existence of a J-shaped fertility-development relationship in the United States.