

# Positive and Negative Population Growth and Long-Run Trade Patterns: A Non-Scale Growth Model\*

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## Abstract

This paper builds a two-country, two-sector, non-scale growth model and investigates the relationship between trade patterns and the growth rate of per capita real consumption. We consider negative population growth as well as positive population growth. We show that, as long as the population growth rates of the two countries are different, if the country that accumulates capital stock has negative population growth, no trade patterns are sustainable in the long run. This is true irrespective of the population growth rate of the other country. Moreover, we show that, if the country that accumulates capital stock has positive population growth, two trade patterns are sustainable in the long run. In this case, either each country's per capita growth is determined by the population growth of the capital-accumulating country or the population growth of both countries, depending on which of the two trade patterns is realized.

*Keywords:* positive/negative population growth; trade patterns; non-scale growth model

*JEL Classification:* F10; F43; O11; O41

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