

Economic geography, endogenous fertility and agglomeration

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January 18, 2013

Abstract

In this paper, we construct an inter-regional trade model like Krugman (1980), Helpman and Krugman (1985), and Fujita, Krugman and Venables (1999) with endogenous fertility rates. Our model shows that fertility rates in a large region becomes lower than the small region, which is induced by the agglomeration of manufacturing firms in a large region. We study the effect of a decline in transportation costs, and show that a decline in transportation costs manifests the agglomeration of manufacturing firms, which also lowers the fertility rates in both large and small regions.

Finally, we extend our two-region model to a multi-region inter-regional trade model, we show that the number of manufacturing firms in larger regions is always larger than the smaller regions. With this manufacturing location, fertility rates in larger region is always lower than smaller region.

JEL Classification: J13, R10.

Key words: agglomeration, fertility rates, transportation costs, consumerism.

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