## Which has stronger impacts on regional segregation: Benefits from industrial agglomeration or ethno-linguistic clustering? \*

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## Abstract

We investigated how regional segregation patterns are affected by benefits from industrial agglomeration and ethnic clustering by adding ethnicity externality into OTT model. By setting some assumptions on exogenous population distribution and constitution, we showed that ethnicity segregation is persistent, while ethnically mixed distribution appears only when trade costs are low. Because we can find a lot of examples of regional ethnicity segregation which are persistent such as Quebec, Geneve and so on, our result can explain the mechanism of emergence of regional segregation. Also we showed that when ethnicity clustering preference is not so intense, ethnicity mixing can occur like in Catalonia. With this model, symmetry break (i.e., transition of industrial distribution from dispersion to agglomeration) does not occurr unlike in other NEG literatures. However, by relaxing the exogenous population constitution and relying on numerical analyses, we find that the possibility of transition from industrial dispersed equilibrium to industrial agglomeration equilibrium. Finally, we gave some explanation on why the social optimum and equilibrium differ in light of trade costs and ethnicity preference intensity: Social optimum is less sensitive to a change in trade costs and is more sensitive to a change in ethnicity preference intensity than the equilibrium yielded by individuals' utility maximization.

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