

consume a modern differentiated good and a homogeneous good. The latter good cannot be consumed below a subsistence level. The assumption of non homotetic preferences gives rise to a process of successive waves of industrialization in different countries when there are exogenous increases in the size of labor endowment. In fact, increases in labor endowments expand industry more than the homogeneous sector because of the increases in wages in the country in which industry is agglomerated. However, Puga and Venables (1996) use the particular version of the monopolistic competition model developed by Dixit and Stiglitz (1977) and the assumption of iceberg trade costs, with intersectorally mobile and internationally immobile workers. On the contrary, we use the solvable model by Ottaviano et al. (2002), where our results derive from heterogeneous preferences among different kind of workers and not by the assumption of quasi homotetic preferences. Moreover, we are able to capture changes of relative prices due not only to the competition effect but also to the specific heterogeneity in preferences.

Finally, we observe that, by considering the particular case of preference heterogeneity with $\rho < 1$, we are able to find another channel through which we may reproduce the results by Helpman (1997) or by Forslid and Wooton (2003). In fact, while in Helpman (1997) complete agglomeration may be prevented by the increase in prices of non-traded goods which leads to stable asymmetric equilibria, in Forslid and Wooton (2003) these equilibria arise for intermediate trade costs when comparative advantage dominates on NEG agglomeration force. In our case, asymmetric equilibria can be found because of the effects that we described which are strictly related to the properties of the demand side.

5 Conclusions

The dependence of equilibrium prices on the spatial distribution of consumers and workers has been stressed by research in spatial pricing theory which, as Ottaviano et al. (2002, p. 410) point out, “shows that demand elasticity varies with distance while prices change with the level of demand and the intensity of competition”. In order to capture this evidence, Ottaviano et al. (2002)

propose the linear core-periphery model. In this work we claim that there is another particular channel through which equilibrium prices exhibit a dependence on the spatial distribution of firms and consumers which acts through preference heterogeneity which we introduce in the linear core-periphery model

By considering a simple potential kind of heterogeneity in the consumption of different goods among different consumers we are able to describe an additional source of dependence of equilibrium prices on the demand properties shaped by the interregional distribution of workers. In particular, this force can either strengthen, or weaken the process which leads to agglomeration. In fact, it reinforces agglomeration when skilled workers have a weaker preference for the modern good and variety in its consumption, with $\rho > 1$, which implies that prices charged by both local and foreign firms are obliged to fall when the mass of local firms increases. However, when the intensity of skilled workers' preference for the modern good and its variety is stronger, that is when $\rho < 1$, prices charged by firms, either local or foreign, may even increase when the mass of local firms increases therefore acting as a dispersion force. These results arise in our work from the fact that, together with the *competition effect* on prices generated by changes in the distribution of workers and firms, we consider the additional effect on prices due to preference heterogeneity which acts through the change in the relative weight of demand for the modern goods with respect to the traditional good, that is the *preference effect*.

Moreover, the introduction of taste heterogeneity allows us to provide another explanation of the potential outcome of asymmetric equilibria. Finally, we would like to stress that, by introducing forces generated by simple workers' preference differences on the consumption of goods, this work simply adds another plug to the complex mosaic of forces considered by NEG models as responsible of the shaping of economic activity distribution in space.

References

R. Baldwin, R. Forslid, P. Martin, G. Ottaviano, F. Robert-Nicoud, *Economic Geography and Public Policy*, Princeton University Press, 2003.