

Chapter 9. The use of the Midelfarth-Knarvik-model to study determinants of historical industrial locations

Stijn Ronsse, University of Ghent (Stijn.Ronsse@UGent.be)

Glenn Rayp, University of Ghent (Glenn.Rayp@UGent.be)

The last two decades, the study of determinants of industrial locations gained in popularity, not only from a contemporary but also from a historical perspective. In 2015 we presented an overview that illustrated the popularity of this topic. As stated, studies were conducted primarily for the United Kingdom, Spain, Poland, the United States and for the whole of the European Union. We added Belgium to the list by analyzing why the industry shifted from the southern to the northern part of the country.

Initially, much attention was paid to the importance of natural endowments, but the increasing popularity of the New Economic Geography since the 90's highlighted agglomeration effects. Depending on the studied country and period, one of these two theories was argued to be more suitable to explain industrial patterns. However, both theories were never combined in one model until the year 2000. The publication of *The location of European industry* was a milestone for the field. Since then the Midelfarth Knarvik model has been used increasingly to study determinants of industrial locations. The model combines elements from the Heckscher-Ohlin theory with New Economic Geography and hence allows to test whether endowments or agglomeration effects are relatively dominant in explaining industrial patterns.

Although the model has proven its value, there are several pitfalls to take into account when applying it for historical research. Methodologically, the accuracy of the model is questioned when historical data is used. The basic model requires qualitative information about a variety of variables, which are often not available for the period before 1960. This does not imply that it is not suitable to analyze historical case studies, but a critical assessment of the potential and the limitations is advisable. This article addresses these and discusses potential solutions that allow to deal with endogeneity and missing variables. If possible, we would like to demonstrate these solutions by analyzing our own data (for Belgium on Lau2 level) or data sets of contributors of this volume.