

# **Endogenous sorting around the discontinuity threshold: The case of a neighbourhood investment programme\***

Sander Gerritsen, Bas ter Weel, and Dinand Webbink

## **Abstract**

This paper investigates the setup of a large-scale governmental neighbourhood investment programme in the Netherlands. Selection of neighbourhoods into the programme was determined by their score on a ‘quality’ index. At first sight this is a textbook example for the application of a regression discontinuity (RD) design to estimate the causal effect of the programme on neighbourhood outcomes. However, at the threshold we find a remarkably large gap in the proportion of non-Western immigrants, a variable not included in the index. In addition, the pattern of non-compliance with the assignment rule is consistent with investing in neighbourhoods with a high share of non-Western immigrants. Endogenous sorting into the programme by policymakers seems a likely explanation. This case illustrates that RD designs can be invalid even when the units that receive treatment have no control over the assignment.

---

\* We thank Josh Angrist, Casper van Ewijk, Justin McCrary and Coen Teulings for helpful comments and discussions and representatives from the Dutch Ministry of the Interior and Kingdom Relations and the Dutch Ministry of Ministry of Health, Welfare and Sport for useful discussions about the neighbourhood programme. We would also like to thank Joost Smits for access to the election data.