Place-based policies and the housing market
—Codebook—

By HANS R.A. KOSTER[a] *and* JOS VAN OMMEREN[b]

[a] Corresponding author, e-mail: h.koster@vu.nl. Department of Spatial Economics, Vrije Universiteit Amsterdam, De Boelelaan 1105 1081 HV Amsterdam. Hans is also affiliated with the National Research University – Higher School of Economics, the Tinbergen Institute, the Centre for Economic Performance at the London School of Economics and the Centre for Economic Policy Research (CEPR).
[b] E-mail: jos.van.ommeren@vu.nl. Department of Spatial Economics, Vrije Universiteit Amsterdam, De Boelelaan 1105 1081 HV Amsterdam. Jos is also affiliated with the Tinbergen Institute.

I. Datasets

Because the data used in the paper are propriety data, we cannot make the files public. In principle, the house price data from *NVM* can made available to any researcher based at a Dutch university. Alternatively, all the data (including information on z-scores, rents, and neighbourhood characteristics) can be made available at the Vrije Universiteit for purposes of replication. If one aims to replicate the results, please send the corresponding author a request.

II. Do-files

Here, we will introduce the several do-files as to construct the datasets and estimate the regressions in the paper.

1. The file "1. Data set up.do" reads in all the data and makes the data selections as described in the paper. For the sensitivity analysis, one can select more options by changing the 'globals' under "Set sensitivity options". This will create additional variables used in the sensitivity analysis. In this file, we also create the tables with descriptive statistics, as displayed in the paper.
2. The file "2. Graphical analysis" creates the data for the graphs as displayed in Figures 3, 4 and B2. The option *trends* creates Figure B2, while the options *rddfig* creates Figures 3 and 4. The option *rddfigfirst* tests for cross-sectional differences in the variables of interest (not included in the paper).
3. In the third file "3. McCrary Test" we test whether the distribution of the z-score is continuous at the threshold using the ado-file "DCdensity". This will create Figures 2 and B1 in Appendix B.
4. In "4. Bandwidth.do" we determine the bandwidth for each specification in the paper, by changing the different options. For example, we distinguish between a sharp RDD and a fuzzy RDD and include different control variables.
5. Given the bandwidth, we use "5. Regressions.do" to estimate the baseline regressions, displayed in Table 2. The first-stage regression results are written to Table B.5 in Appendix B.4.
6. The file "6. Sensitivity.do" estimates all other regression in the paper. By changing the 'globals' under *Set options* one can replicate Tables 3 and 4, as well as the results reported in Appendix B.5 and Appendix C. Note that for most specifications one needs to use "4. Bandwidth.do" to determine the bandwidth, given the variables included and options selected.
7. In the file "7. Total gains.do", we calculate the total gains in housing values due to the place-based investments, as reported in Table 5.

8. Then there are a couple of ancillary do-files. Files "8. Rental data set-up", "9. Rental bandwidth" and "10. Rental regressions" are necessary to replicate the results reported in Appendix C.4. The file "11. Bandwidth CS" calculates the bandwidth for the regressions with demographics in Appendix B.6 and the regressions with postcode fixed effects (instead of repeat sales in Appendix C.11. The final file "12. PSM.do" is the selection of neighbourhoods using the nonparametric propensity score method as described in Appendix C.12.

III. Codebook of variables

TABLE — CODEBOOK OF VARIABLES

Variable name	*Description*
obsid	unique observation id
xcoord	x-coordinate (gcs amersfoort)
ycoord	y-coordinate (gcs amersfoort)
street	street
houseid	group(houseid2 random)
pc6	postcode 6-digit
pc4	postcode 4-digit
mun	municipality code
daysonmarket	days on the market
day	day of observation
distcbd	distance to CBD of city with >50,000 inhabitants
pricesqm	transaction price in euro per m2
logpricesqm	logpricesqm
logdaysonmarket	logdaysonmarket
size	size of property in m2
logsize	logsize
parking	property has private parking space
maintgood	maintenance state is good
maintoutside	maintenance score of the outside
maintinside	maintenance score of the inside
year	year of observation
yearmin	yearmin
month	month of observation
pc4cl	pc4, cluster at 40 districts
zscore	z-score of neighbourhood
winsemius	winsemius selection
zscorerank	rank of neighbourhood by z-score
kwrank	rank of neighbourhood by selection and z-score
kwadjacent	pc4 adjacent to kw-neighbourhood
kwdistcentroid	distance of each pc4 centroid to nearest krachtwijk
scoreruleadjacent	pc4 adjacent to neighbourhood with z>7.3
kwplus	krachtwijk 40-plus neighbourhood
psm_c	propensity score matching - calipher
psm_nnwr	propensity score matching - nearest neighbour w/replacement

TABLE — CODEBOOK OF VARIABLES *CONTINUED*

psm_nnwor	propensity score matching - nearest neighbour wo/replacement
gsbzscore_disintegration	disintegration, gsb z-score
gsbzscore_depletion	depletion, gsb z-score
gsbzscore_nuisance	nuisance, gsb z-score
gsbzscore	overall gsb z-score
gsbneighbourhood	83 highest ranked gsb z-scores
kwinvpp	investments per person
kwinvpsqm	investments per m2
scorerule	scorerule
inkw	in krachtwijk
kwpc4	pc4 of nearest krachtwijk
kwdist	distance to krachtwijk
scoringruledist	distance to nearest neighbourhood with z>7.29
kamp	in kamp wijk
kampdist	distance to nearest kampwijk
winsemiusdist	distance to nearest winsemius neighbourhood
kwplusdist	distance to nearest plus-krachtwijk
gsbdist	distance to nearest gsb neighbourhood
kwinvpsqm2	kw investments per m^2
kwexcl	kw neighbourhoods that do not meet the scoring rule
logpopdens	log of population density
shforeign	share foreigners
shyoung	share young people (<21)
shold	share elderly people (>64)
shnwforeign	share non-western foreigners
hhsize	household size
luwater	share water (pc4)
income	standardised income in €
logincome	logincome
incomeimp	income is imputed
hhsizepred	household size (shift-share)
incomenpred	income (shift-share)
logincomenpred	log incomen (shift-share)
popdensnpred	population density (shift-share)
logpopdensnpred	log of population density (shift-share)
shnwfornpred	share foreigners (shift-share)
shyoungnpred	share young people (<25) (shift-share)
sholdnpred	share elderly people (>65) (shift-share)
kw_y1	kw investment - year 1
kw_y2	kw investment - year 2
kw_y3	kw investment - year 3
scorerule_y1	scoring rule - year 1
scorerule_y2	scoring rule - year 2
scorerule_y3	scoring rule - year 3
beforeafter	transaction before and after investment

TABLE — CODEBOOK OF VARIABLES *CONTINUED*

zscore_1	z-score[1]
zscorescrule_1	zscore scoring rule[2]
zscorenscrule_1	z-score no scoring rule[1]
zscore_2	z-score[2]
zscorescrule_2	z-score scoring rule[2]
zscorenscrule_2	z-score no scoring rule[2]
zscore_3	z-score[3]
zscorescrule_3	z-score scoring rule[3]
zscorenscrule_3	z-score no scoring rule[3]
dpricesqm	change house price
dlogpricesqm	change log house price
ddaysonmarket	change log days on market
dlogdaysonmarket	change days on market
dpercask	change in the ratio transaction/asking price
dpercaskadj	dpercaskadj
dkw	change in krachtwijk
dkwdist	change distance to krachtwijk
dscorerule	change in meeting the score rule
dsize	change house size
dlogsize	change log house size
drooms	change rooms
dmaintgood	change maintenance quality
dcentralheating	change central heating
dlisted	change listed status
dlogincome	dlogincome
dincomeimp	dincomeimp
dlogpopdens	change population density
dshforeign	change share foreigner
dshnwforeign	change share of non-western foreigner
dshyoung	change share young people
dshold	change share elderly people
dhhsize	change average household size
dlogincomepred	dlogincomepred
dlogpopdenspred	dlogpopdenspred
dshforeignpred	dshforeignpred
dshyoungpred	dshyoungpred
dsholdpred	dsholdpred
dhhsizepred	dhhsizepred
dlogincomenpred	dlogincomenpred
dlogpopdensnpred	dlogpopdensnpred
dshforeignnpred	dshforeignnpred
dshyoungnpred	dshyoungnpred
dsholdnpred	dsholdnpred
dhhsizenpred	dhhsizenpred
dluinfr	change share infrastructure
dlures	change share residential land
dluind	change share industrial land
dluopens	change share open space
dluwater	dluwater

TABLE — CODEBOOK OF VARIABLES *CONTINUED*

dyear2000	change transaction year
dyear2001	change transaction year
dyear2002	change transaction year
dyear2003	change transaction year
dyear2004	change transaction year
dyear2005	change transaction year
dyear2006	change transaction year
dyear2007	change transaction year
dyear2008	change transaction year
dyear2009	change transaction year
dyear2010	change transaction year
dyear2011	change transaction year
dyear2012	change transaction year
dyear2013	change transaction year
dyear2014	change transaction year
dkwinvpsqm	change in kw-investments per m^2
dkwinvpsqm2	change in (kw-investments per m^2)^2
dscorerule_date1	dscorerule_date1
dscorerule_date2	dscorerule_date2
dscorerule_winsemius	dscorerule_winsemius
dpbo_kamp	change in placebo - kamp
dpbo_winsemius	change in placebo - winsemius
dpbo_scoreruletime	change in placebo - score rule time
dpbo_gsb	change in placebo - GSB
dpbo_kampXdayspbo	change in days placebo - kamp
dpbo_winsemiusXdayspbo	change in days placebo - winsemius
dpbo_gsbXdayspbo	change in days placebo - GSB
ddaysinv	change in days since investment
ddaysinv_sc	change in days since eligibility of scoring rule
ddaysinv1_sc	change in days since eligibility of scoring rule
dkw_y1	change in KW, year 1
dscorerule_y1	cahnge in eligibility of scoring rule, year 1
dkw_y2	change in KW, year 2
dscorerule_y2	change in eligibility of scoring rule, year 2
dkw_y3	change in KW, year 3
dscorerule_y3	change in eligibility of scoring rule, year 3