Web Appendix to
Agglomeration in the Periphery

A Deriving the Labor Demand Curves

The equilibrium consists of a distribution of workers across locations and sectors. The aggregate labor force, $N = \sum N_j$, is exogeneous. Within each location, the share $\lambda_j \in [0, 1]$ of the population works in manufacturing, while the rest work in agriculture. In equilibrium, vectors $\mathbf{N}$ and λ are such that no-one would gain from moving to another sector or location.

Within a location, sectoral wages are given by the marginal product of labor

$$\begin{aligned} w_{Aj} &= f_L\left(\left[1 - \lambda_j\right] N_j, F_j\right) p \\ w_{Mj} &= \alpha\left(\lambda_j N_j\right) + \alpha'\left(\lambda_j N_j\right) \lambda_j N_j \end{aligned}$$

where w_{Aj} is the wage in agriculture in location j, w_{Mj} is the wage in manufacturing, p is the price of the agricultural good and the price of the manufacturing good is normalized to one.

Given the assumptions of Section 2.1, w_{Aj} is increasing in λ_j and F_j, and decreasing in N_j. That is, for a given population, a larger share working in the manufacturing sector corresponds to more land per agricultural worker. Similarly for any λ_j, a larger population leads to more agricultural workers per an unit of land.

The relationship between wages in manufacturing and the size of the sector depend on α'. If returns to scale are constant, wages are not affected by the size of the sector. If returns to scale are increasing, wages in manufacturing increase with both λ_j and N_j.

Figure A1 characterizes the within-location equilibrium by plotting wages as a function of the share of the population working in manufacturing. When population is small, N_1, the marginal product of labor in agriculture remains high even when everyone is working in this sector. The corresponding equilibrium is the corner solution $\lambda = 0$ and wages are w_1. As population grows, wages in agriculture decrease. Eventually, the population becomes sufficiently large to sustain a manufacturing sector. If manufacturing exhibits constant returns to scale, it emerges gradually and fixes wages at w_M (left panel). If returns to scale are increasing, $\lambda_2 N_2$ workers suddenly move from agriculture to manufacturing when population reaches N_2 (right panel). Consequently, wages jump from w_2' to w_2. After this point, further population growth leads to a gradual growth of manufacturing and wages.[1]

B Additional Robustness Checks

B.1 Potential Biases of the 2SLS Estimates

Let's write the model in matrix notation as

$$\begin{aligned} \mathbf{Y_t} &= \mathbf{G_w}\beta + \mathbf{X}\gamma_\mathbf{1} + \mathbf{Z}\pi_\mathbf{1} + u \\ \mathbf{G_w} &= \mathbf{X}\gamma_2 + \mathbf{Z}\pi_\mathbf{2} + v \end{aligned} \tag{A1}$$

[1]Note that when $N > N_2$ in Figure A1, two allocations between the sectors equalize wages in Figure A1, e.g. λ_3' and λ_3. However, only λ_3 is a stable equilibrium. To see this, consider the case where the initial manufacturing share is λ_3'. If one worker now moves from agriculture to manufacturing, wages increase more in manufacturing than in agriculture. Thus more workers will make the transition and the process continues until wages are equalized at λ_3.

where $\mathbf{Y_t}$ is a vector of outcomes, $\mathbf{G_w}$ is a vector of the wartime growth rates, $\mathbf{X}$ is a matrix of control variables and $\mathbf{Z}$ is a matrix of instruments. The parameter of interest is β. In the simple case where $\mathbf{X}$ is omitted, the probability limit for the 2SLS estimate is

$$\text{plim } \hat{\beta} = \beta + \text{plim} \left(\mathbf{D_t'P_Z D_t}\right)^{-1} \mathbf{D_t' Z} \pi_{\mathbf{1}} \tag{A2}$$

where $\mathbf{P_Z} = \mathbf{Z}\left(\mathbf{Z'Z}\right)^{\mathbf{-1}} \mathbf{Z'}$. My identifying assumption is that the elements of parameter vector π_1 are zero.

Note that in the case of one instrument, the formula for asymptotic bias simplifies to π_1/π_2. From the first-stage regressions (Tables 1 and A1), I know that $\pi_{21} > 0$, $\pi_{22} > 0$ and $\pi_{23} < 0$, where π_{21}, π_{22} and π_{23} are the first-stage coefficients for expropriable privately owned land, government owned land and the proportion of Swedish-speakers in the municipality, respectively. Thus, my conclusions could be misguided if the presence of large private farms or large amounts of government owned land—or some unobservable factors correlated with them—had a sufficiently large positive direct effect on post-war population growth. Similarly, a sufficiently large negative direct effect of a Swedish-speaking population could lead to a qualitatively incorrect conclusion.

B.2 Sensitivity to Violations of the Exclusion Restriction

As discussed in Section 6.2, all instruments individually lead to the same conclusion. While this finding is reassuring, it is impossible to rule out that all of the instruments would yield similarly biased estimates. To be clear, I find this very unlikely. Nevertheless, it is informative to ask how large the violations of the exclusion restriction would need to be in order to qualitatively change the conclusions.

Note that if I knew that $\pi_1 = \pi_1^0$, I could consistently estimate β from

$$\left(\mathbf{Y_t} - \mathbf{Z}\pi_\mathbf{1}^\mathbf{0}\right) = \mathbf{G_w}\beta + \mathbf{X}\gamma_\mathbf{1} + u \tag{A3}$$

with 2SLS using $\mathbf{Z}$ as instruments for $\mathbf{G_W}$ (Conley, Hansen, and Rossi, forthcoming). Of course, I do not know π_1^0. However, I can perform sensitivity analysis by studying the implications of different assumptions about its values.

Table A2 reports the results when assuming a range of values for π_1. The dependent variable in all regressions is population growth between 1949 and 2000, and I control for pre-war municipality characteristics. The results illustrate that the results are qualitatively unchanged, even in the presence of substantial violations of the exclusion restriction. In order to obtain a point estimate of zero, one would need to have a prior such as $\pi_{11} = .3$, $\pi_{12} = .3$, $\pi_{13} = -.3$. In words, one would need to assume that an additional hectare of expropriable land per capita directly increased post-war population growth by 30 percent, that the impact of an additional hectare of publicly owned land per capita would have had a similar effect, *and* that having an entirely Swedish-speaking population would have reduced population growth by 30 percent even in the absence of the settlement policy.

Given that I find no positive association between the pre-war population growth and the land instruments, it seems unlikely that these instruments had a strong direct positive impact on post-war population growth. On the other hand, the point estimates presented in Table 1 and A1 suggest a slight negative association between pre-war population growth and the proportion of Swedish-speaking people in a municipality. Since these estimates are not statistically significant, their sign may be determined purely by chance. Nevertheless, I note that in order to drive the point estimate of β to zero without assuming a positive direct effect of the land instruments, one would need to assume that having a completely Swedish-speaking population reduced the post-war population growth by 60 percent. This seems implausible. Furthermore, my conclusions remain unchanged when I exclude the Swedish-speaking areas from the estimation sample and use only the land instruments.

B.3 Outliers

Another potential concern is that my results could be driven by some municipalities experiencing extreme population growth or decline. To examine this possibility, I gradually exclude observations that are particularly influential for the estimates. I do this by calculating Cook's (1977) distance measure

$$D_i = \frac{\sum_{j=1}^{n} \left(\hat{y}_{jt} - \hat{y}_{j(-i)t}\right)^2}{(k+1)\, s^2} \tag{A4}$$

where $\hat{y}_{jt}$ is the prediction from the full regression model for observation j, $\hat{y}_{j(-i)t}$ is the prediction for observation j from a refitted regression model in which observation i has been omitted, s^2 is the estimated root mean square error and k is the number of parameters in the model. The intuition of this measure is that it is informative about the influence of data point i for the least squares regression estimate. A common rule of thumb is that an observation is suspected as being an outlier when $D_i > 4/(n-k-1)$. In my case, the threshold value is $D_i > 4/(349-10-1) = 0.0118$.

Table A3 reports the results when I gradually exclude the most influential observations. For reference, panel A presents the baseline estimates in a specification with control variables. Panel B presents the estimates when I exclude observations that have Cook's D values larger than twice the rule of thumb threshold ($0.0118 * 2 = 0.0236$). Panel C reports the estimates from a sample excluding the observations above the rule of thumb threshold value, while panel D present the results from excluding observations with Cook's D values larger than a quarter of the rule of thumb value. All estimates suggest that wartime population growth had a statistically significant positive effect on post-war population growth.

B.4 Alternative Study Areas

As a further robustness check, I ask whether the results are sensitive to the choice of the study area. Figure A2 shows three reasonable choices for the estimation sample. My baseline sample, illustrated by the gray area, consists of all rural municipalities that did not loose territory to the Soviet Union. That is, only cities as well as the ceded and partly ceded municipality in the eastern part of the country are excluded. A potential concern in using this sample is that it includes northern municipalities that were endowed with abundant government owned land, but were not influenced by the settlement policy. Hence I repeat the analysis using a restricted sample that excludes the northern part of the country. Next, I repeat the analysis using only those rural municipalities that were mentioned in the Settlement Plan, illustrated by the dotted line in Figure A2.

Table A4 reports the results. For reference, panel A reports the baseline estimates. The conclusions remain qualitatively unchanged when using the restricted sample (panel B) or only municipalities mentioned in the Resettlement Plan (panel C). Furthermore, panel D reports the estimates using the baseline data augmented with cities. Again, the results are similar to those obtained from the baseline sample.

B.5 Alternative Standard Errors

I next consider the robustness of my conclusions to alternative modes of inference. Thus far I have reported standard errors based on the assumption of the error terms being homoscedastic and spatially independent. This choice was driven by two factors. First, heteroscedastic robust standard errors are biased downwards when heteroscedasticity is relatively modest and the sample size is small (Chesher and Jewitt, 1987). As it turns out, heteroscedastic robust standard errors are smaller than the conventional standard errors for my key 2SLS estimates. Thus, robust standard errors are likely to overstate the precision of these estimates. On the other hand, I show below that allowing for spatial dependence has little effect on the standard errors of instrumental variables estimates. However, the interpretation of the spatial GMM estimates has not been established to the same extent as the interpretation of the standard 2SLS estimates.

Table A5 presents the key estimates and standard errors from alternative approaches. For reference, the first rows of Panel A and B reproduce the OLS and 2SLS estimates and conventional standard errors. The third rows report heteroscedasticity robust standard errors. For OLS estimates, robust standard errors are substantially larger than the conventional ones. However, in the 2SLS regressions most of the robust standard errors are smaller than the conventional ones. Given the premium I place on the 2SLS estimates due to their more plausible identification, it seems reasonable to think that conventional standard errors provide more conservative inference than robust standard errors.

I next consider the implications of relaxing the assumption of spatial independence using an approach suggested by Conley (1999). This approach is similar to the time series heteroskedasticity and autocovariance (HAC) consistent covariance matrix estimation. Specifically, the spatial GMM estimator takes the same form as GMM estimators for time series or independent data, except that inference and the weighting matrix are based on the covariance matrix estimator that allows the unobserved factors affecting the outcomes of each location to be correlated among all locations within a prespecified distance. While geographic distance is unlikely to be a perfect measure of the true "economic distance" determining spatial dependence, the covariance matrix estimator remains consistent given that measurement error in the distance proxy is bounded (see Conley, 1999, 2008, for details).

Panel C presents spatial GMM results for the cut-off distances of 50, 100 and 250 kilometers. Both the point estimates and standard errors are similar to those obtained from 2SLS. I also present similar standard errors for OLS estimates in the three last rows of Panel A. These standard errors are close to the heteroscedasticity robust OLS standard errors. Most importantly, all approaches yield statistically highly significant estimates and lead to the same conclusions.

B.6 Migration Flows

As a final robustness check, I report additional evidence on migration flows driving the post-war popualtion growth rate in the resettlement area. To do this, I regress measures of post-war migration flows on wartime population growth.

Table A6 reports the results. The dependent variable in the first row is the sum of municipality's annual net migration flows between 1951 and 1997 scaled by its population in 1951. The estimates indicate that the resettlement shock increased later net migration. Interestingly, when I study in- and out-migration separately, I find a large positive effect on both. The impact on out-migration is in line with a previous finding that the displaced remained more mobile also in the post-war period (Sarvimäki, Uusitalo, and Jäntti, 2009). It is also consistent with the hypothesis that some locals would have responded to the influx of displaced persons by moving out.

C Data sources

Population 1930: Statistics Finland (1979): *Väestön elinkeino 1880-1975.* **Population 1939–2000**: Statistical Yearbooks, various years. **Industry structure 1930–1970**: Statistics Finland (1979): *Väestön elinkeino 1880-1975.* **Industry structure 1980–2000**: Statistics Finland's aggregation from microdata (*Työssäkäyntitilasto*) recording the sector of employment for the entire population living in Finland at the end of each year. **Migration**:

Statistics Finland (*pc-Axis, Population Structure*). **Taxable income per capita** (defined as the taxbase of the municipality, i.e. number of *veroäyri*, divided by the population): Central Statistical Office: SVT XXXI A:15. **Swedish speaking population in 1930**: Statistical Yearbook 1937**. Longitude and latitude**: Polygon centroid of the municipalities presented in Figure 2. **City**: Statistics Finland / Central Statistical Office categorizes municipalities into cities, market towns and rural municipalities. My definition of an urban area is based on the pre-war category of cities augmented with two municipalities (Espoo and Vantaa) bordering Helsinki (the capital). The municipalities classified as urban are: Helsinki, Espoo, Vantaa (formerly Helsingin maalaiskunta), Tampere, Turku, Vaasa, Lahti, Oulu, Kuopio, Kotka, Kemi, Pori, Lappeenranta, Mikkeli, Rauma, Hämeenlinna, Jyväskylä, Kokkola, Savonlinna, Hanko, Porvoo, Kajaani, Pietarsaari, Joensuu, Hamina, Loviisa, Tammisaari, Iisalmi, Raahe, Uusikaupunki, Heinola, Kristiinankaupunki, Tornio, Kaskinen, Uusikaarlepyy and Naantali. **Neighboring a city** (municipalities bordering the cities defined above): manual inspection of a map. **Municipality has a railway station**: Kotavaara, Antikainen, and Rusanen (forthcoming). **Municipality included in the Settlement Plan**: Paukkunen, L. (1989). *Siirtokarjalaiset nyky-Suomessa.* University of Jyväskylä. **Number of displaced persons in municipalities**: National Archives, SM / Siirtoväenasiainosasto / Kansiot H1, H1a, H2, H3, H4, H5, H6, H7, H8, H9. **Price indexes**: Lehtonen, V-M, Puustinen, T. and Tuominen, P. (1983): Vuoden 1980 kuntien kalleustutkimus. Statistics Finland.

D Aggregation

The spatial unit of all variables is a municipality. In order to ensure that the spatial units remain stable over time, I have aggregated all municipalities that either merge or split over the study period. That is, if municipality A merged with municipality B during the study period, I aggregate A and B for the pre-merge period. Similarly, if municipality C dissolved to D and E, I aggregate D and E for the post-dissolution period. There are a few instances where a municipality has merged with several municipalities. In these cases, I divide the merging municipality into the host municipalities using the population of the host municipalities (measured one year prior to the merge) as weights. That is, if part of municipality F was merged with G and the rest with H, I assign the share $P_G/\left(P_G+P_H\right)$ to municipality G and $P_H/\left(P_G+P_H\right)$ to municipality H.

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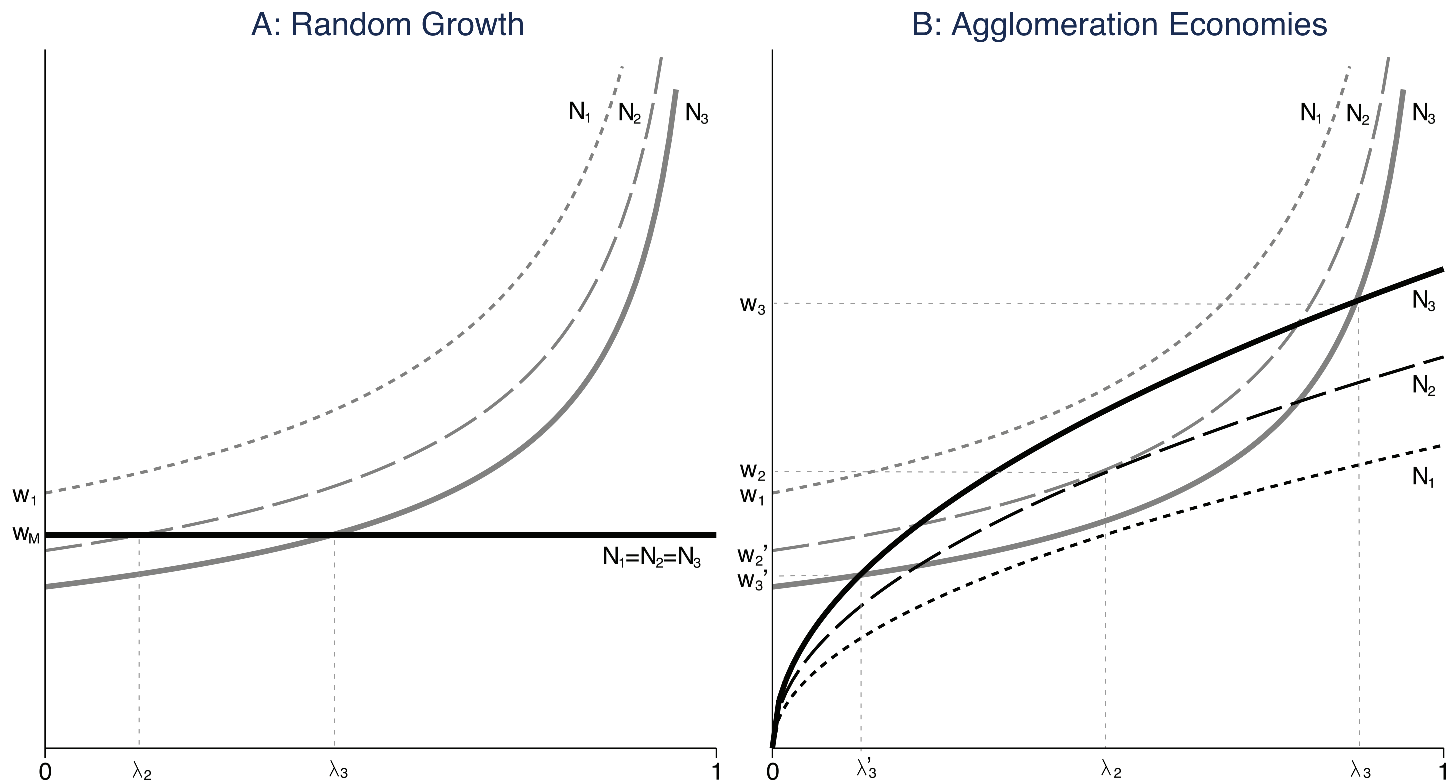
Figure A1: Equilibrium within a Location



Note: The black (flat/concanve) lines plot the marginal product of labor in manufacturing and the grey (convex) lines in agriculture as a function of the share of population working in manufacturing for three levels of total population, $N_1 < N_2 < N_3$.

Figure A2: Alternative Sample Areas

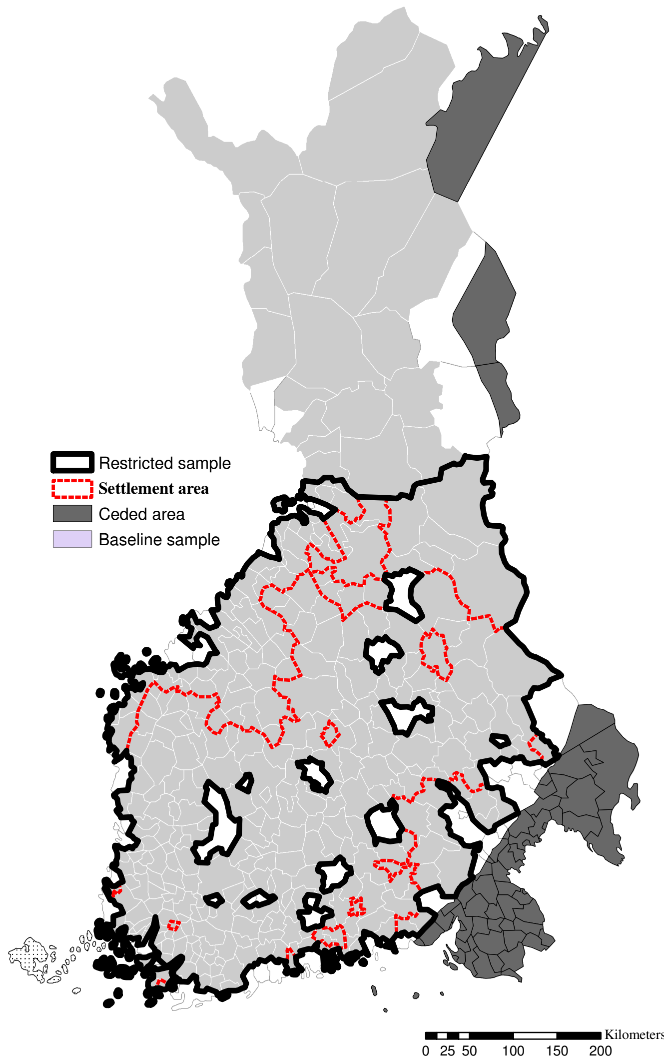


Table A1: Pre-War and Wartime Population Growth by Instrument

	First-Stage (pop. growth 1939–1949)			Falsification Exercise (pop. growth 1930–1939)		
	(1)	(2)	(3)	(4)	(5)	(6)
A: Baseline						
Hectares of expropriable land per capita (1930)	0.26 (0.05)			-0.18 (0.07)		
Hectares of publicly owned land per capita (1940)		0.38 (0.11)			-0.08 (0.14)	
Share of Swedish-speaking population (1930)			-0.19 (0.04)			-0.04 (0.05)
F-statistic for the instrument	28.8	12.7	24.2	7.6	0.3	0.7
Partial R^2	0.08	0.04	0.07	0.02	0.00	0.00
B: Controlling for pre-war municipality characteristics and geography						
Hectares of expropriable land per capita (1930)	0.31 (0.05)			-0.06 (0.07)		
Hectares of publicly owned land per capita (1940)		0.42 (0.10)			-0.20 (0.14)	
Share of Swedish-speaking population (1930)			-0.22 (0.04)			-0.04 (0.05)
F-statistic for the instrument	33.1	17.7	35.9	0.7	2.0	0.6
Partial R^2	0.09	0.05	0.10	0.00	0.01	0.00

Note: OLS estimates and standard errors (in parentheses). Sample: 349 rural municipalities. Control variables: see Table 1.

Table A2: Sensitivity to Violations of the Exclusion Restriction

		$\pi_{12}=0$	$\pi_{12}=.1$	$\pi_{12}=.2$	$\pi_{12}=.3$
$\pi_{11}=0$					
	$\pi_{13}=0$	1.65	1.59	1.52	1.46
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.1$	1.37	1.31	1.24	1.18
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.2$	1.09	1.03	0.96	0.90
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.3$	0.81	0.74	0.68	0.62
		(0.55)	(0.55)	(0.55)	(0.55)
$\pi_{11}=.1$					
	$\pi_{13}=0$	1.44	1.38	1.32	1.26
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.1$	1.16	1.10	1.04	0.97
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.2$	0.88	0.82	0.76	0.69
		(0.55)	(0.55)	(0.55)	(0.55)
	$\pi_{13}=-.3$	0.60	0.54	0.48	0.41
		(0.56)	(0.56)	(0.56)	(0.57)
$\pi_{11}=.2$					
	$\pi_{13}=0$	1.24	1.17	1.11	1.05
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.1$	0.96	0.89	0.83	0.77
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.2$	0.68	0.61	0.55	0.49
		(0.55)	(0.55)	(0.55)	(0.55)
	$\pi_{13}=-.3$	0.39	0.33	0.27	0.21
		(0.56)	(0.56)	(0.56)	(0.57)
$\pi_{11}=.3$					
	$\pi_{13}=0$	1.03	0.97	0.91	0.84
		(0.54)	(0.54)	(0.54)	(0.54)
	$\pi_{13}=-.1$	0.75	0.69	0.62	0.56
		(0.55)	(0.55)	(0.55)	(0.55)
	$\pi_{13}=-.2$	0.47	0.41	0.34	0.28
		(0.55)	(0.56)	(0.56)	(0.56)
	$\pi_{13}=-.3$	0.19	0.13	0.06	0.00
		(0.57)	(0.57)	(0.57)	(0.57)

Note: 2SLS estimates of β from estimation equation $\left(\mathbf{Y_t} - \mathbf{Z}\pi_{\mathbf{1}}^{\mathbf{0}}\right) = \mathbf{G_w}\beta + \mathbf{X}\gamma_{\mathbf{1}} + u$. Parameters π_{11}, π_{12} and π_{13} refer to the assumed direct effect of hectares of exproriable privately owned land per capita, hectares of government owned land per capita and the share of Swedish-speaking population, respectively. Outcome: population growth rate between 1949 and 2000. Control variables: see Table 1.

Table A3: Sensitivity to Outliers

	Dependent variable: Population Growth between 1949 and					
	1950	1960	1970	1980	1990	2000
A: Baseline						
OLS	0.05	0.43	0.76	1.09	1.33	1.51
	(0.01)	(0.18)	(0.23)	(0.32)	(0.39)	(0.45)
2SLS	0.11	0.36	0.59	0.93	1.32	1.65
	(0.06)	(0.13)	(0.18)	(0.27)	(0.35)	(0.43)
Observations	349	349	349	349	349	349
B: Excluding observations with $D > .0236$						
OLS	0.03	0.32	0.57	0.76	1.04	1.10
	(0.01)	(0.05)	(0.08)	(0.12)	(0.17)	(0.18)
2SLS	0.05	0.30	0.50	0.62	0.97	1.11
	(0.02)	(0.11)	(0.18)	(0.25)	(0.32)	(0.39)
Observations	342	338	336	332	333	335
C: Excluding observations with $D > .0118$						
OLS	0.03	0.32	0.62	0.80	0.95	1.01
	(0.01)	(0.05)	(0.08)	(0.13)	(0.16)	(0.17)
2SLS	0.05	0.22	0.53	0.62	0.71	0.86
	(0.02)	(0.11)	(0.15)	(0.26)	(0.31)	(0.36)
Observations	339	329	321	323	323	326
D: Excluding observations with $D > .0030$						
OLS	0.03	0.30	0.51	0.61	0.91	0.99
	(0.01)	(0.04)	(0.07)	(0.09)	(0.15)	(0.16)
2SLS	0.05	0.25	0.42	0.42	0.62	0.84
	(0.01)	(0.08)	(0.13)	(0.23)	(0.28)	(0.31)
Observations	307	295	288	285	286	295

Note: OLS and 2SLS estimates for the population growth between 1939 and 1949 and standard errors (in parentheses). D refers to Cook's Distance measures (see the text for discussion). Instruments and control variables: see Table 1.

Table A4: Alternative Sample Areas

	Dependent variable: Population Growth between 1949 and					
	1950	1960	1970	1980	1990	2000
A: Baseline Sample (N=349)						
OLS	0.05	0.43	0.76	1.09	1.33	1.51
	(0.01)	(0.06)	(0.08)	(0.13)	(0.17)	(0.20)
2SLS	0.11	0.36	0.59	0.93	1.32	1.65
	(0.03)	(0.15)	(0.22)	(0.34)	(0.45)	(0.54)
B: Restricted Sample (N=330)						
OLS	0.04	0.41	0.72	1.05	1.29	1.48
	(0.01)	(0.06)	(0.09)	(0.14)	(0.18)	(0.21)
2SLS	0.10	0.25	0.29	0.61	1.04	1.42
	(0.03)	(0.17)	(0.26)	(0.39)	(0.50)	(0.61)
C: Settlement Area only (N=234)						
OLS	0.05	0.47	0.82	1.16	1.42	1.60
	(0.01)	(0.07)	(0.09)	(0.13)	(0.17)	(0.20)
2SLS	0.06	0.25	0.32	0.52	1.00	1.36
	(0.02)	(0.20)	(0.28)	(0.40)	(0.50)	(0.58)
D: All (baseline sample augmented with cities, N=382)						
OLS	-0.03	0.34	0.64	0.91	1.16	1.38
	(0.02)	(0.06)	(0.09)	(0.14)	(0.18)	(0.21)
2SLS	0.07	0.28	0.39	0.53	0.78	0.98
	(0.04)	(0.15)	(0.24)	(0.37)	(0.47)	(0.57)

Note: OLS and 2SLS estimates for the population growth between 1939 and 1949 and standard errors (in parentheses). Instruments and control variables: see Table 2. In addition, panel D controls for the municipality being classified as a city before the war.

Table A5: Alternative Standard Errors

	Dependent variable: Population Growth between 1949 and					
	1950	1960	1970	1980	1990	2000
A: OLS						
Coefficient	0.05	0.43	0.76	1.09	1.33	1.51
Standard errors:						
Conventional	(0.01)	(0.06)	(0.08)	(0.13)	(0.17)	(0.20)
Robust	(0.01)	(0.18)	(0.23)	(0.32)	(0.39)	(0.45)
Spatial (50km)	(0.01)	(0.18)	(0.24)	(0.34)	(0.43)	(0.50)
Spatial (100km)	(0.01)	(0.19)	(0.24)	(0.33)	(0.43)	(0.49)
Spatial (250km)	(0.01)	(0.16)	(0.20)	(0.25)	(0.31)	(0.36)
B: 2SLS						
Coefficient	0.11	0.36	0.59	0.93	1.32	1.65
Standard errors:						
Conventional	(0.03)	(0.15)	(0.22)	(0.34)	(0.45)	(0.54)
Robust	(0.06)	(0.13)	(0.18)	(0.27)	(0.35)	(0.43)
C: Spatial GMM						
Cut-off: 50km	0.07	0.32	0.53	0.86	1.22	1.52
	(0.03)	(0.15)	(0.19)	(0.28)	(0.41)	(0.52)
Cut-off: 100km	0.07	0.34	0.53	0.85	1.24	1.57
	(0.03)	(0.14)	(0.19)	(0.26)	(0.38)	(0.50)
Cut-off: 250km	0.08	0.33	0.53	0.84	1.30	1.76
	(0.03)	(0.13)	(0.16)	(0.22)	(0.30)	(0.40)

Note: OLS, 2SLS and Conley's (1999) spatial GMM estimates for the population growth between 1939 and 1949 and standard errors (in parentheses). Instruments and control variables: see Table 2. Conventional standard errors are square roots of the diagonal elements of the covariance matrix estimator $\hat{\mathbf{V}}_{\mathbf{c}} = (\mathbf{X'X})^{-1} \left(\sum \hat{\epsilon}_i^2/N\right)$, where $\hat{\epsilon}_i = y_i - \mathbf{X_i'}\hat{\beta}$ is the estimated regression residual. Robust standard errors are square roots of the diagonal elements of the covariance matrix estimator $\hat{\mathbf{V}}_{\mathbf{r}} = N\,(\mathbf{X'X})^{-1} \left(\sum \mathbf{X_i X_i'}\hat{\epsilon}_i^2/N\right)(\mathbf{X'X})^{-1}$. Spatial standard errors are square roots of the diagonal elements of the covariance matrix estimator $\hat{\mathbf{V}}_{\mathbf{s}} = \frac{1}{N}\sum_{i=1}^{N}\sum_{j=1}^{N} K_N(s_i, s_j) \cdot z_{si}\hat{\epsilon}_i z_{sj}^{'}\hat{\epsilon}_j$, where $K_N(s_i, s_j)$ is an uniform kernel taking value one if locations s_i and s_j are within a cut-off distance of each other and zero otherwise.

Table A6: The Impact on Migration Flows, 1951–1997

	OLS		2SLS	
	(1)	(2)	(3)	(4)
Net	0.92	0.71	0.67	0.57
	(0.12)	(0.11)	(0.30)	(0.30)
In (internal)	3.72	3.04	3.58	4.06
	(0.32)	(0.32)	(0.80)	(0.87)
Out (internal)	2.82	2.34	3.09	3.66
	(0.22)	(0.23)	(0.55)	(0.63)
Emigration	-0.02	-0.01	-0.18	-0.17
	(0.01)	(0.01)	(0.03)	(0.03)
Control variables	no	yes	no	yes

Note: OLS and 2SLS estimates for the population growth between 1939 and 1949 and standard errors (in parentheses). Dependent variables are constructed as $\sum_{1951}^{1997} m_{jt}/p_{j1951}$, where m_{jt} is the annual flows of net migration, inmigration from other Finnish municipalities, outmigration to other Finnish municipalities, net emigration, fertility and mortality, and p_{j1951} is municipality's population in 1951. Instruments and control variables: see Table 1.