

Panel and Cross-Sectional Statistics on FIRMBACKBONE

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Introduction

In this document, we provide some cross-sectional and panel statistics from the FIRMBACKBONE datasets. We use sources from KVK (*Kamer van Koophandel*) and from *Stichting* LISA.¹ This document is updated yearly, every time that a new data wave is ready for use. The next section presents the summary statistics from the most recent data wave. The section after presents the panel statistics computed from all available data waves, including the most recent. All figures and tables are available in the Appendix.

Cross-sectional statistics

In this section, we present some summary statistics on the most recent cross section of the FIRMBACKBONE dataset. Figure 1 displays the distinct number of organizations in every given municipality. Table 1 and figure 2 present the number of distinct establishments by economic sector. Table 2 and figure 3 show the number of organizations which have a given number of establishments. Figure 4 maps the average number of establishments of organizations with a headquarter in every given municipality.

Next, we turn to analyzing employment statistics. Table 3 and figure 5 display the distribution of employment at the organization level. Table 4 and figure 6 do the same but at the establishment level. Figure 7 maps the average employment count of organizations with a headquarter in every given municipality. Figure 8 displays the gender distribution of employees by economic sector. Figure 9 shows the gender distribution of employees by the employment size of every organization. Finally, figure 10 maps the gender distribution of employees for every municipality.

We now investigate the spatial distribution of organizations and their headquarters. Figure 11 maps the number of organizations of large and medium size for every municipality. Figure 12 does the same for the headquarters. Finally, figure 13 plots the ratio of the number of headquarters to the number of distinct organizations in every municipality. Figures 14 and 15 repeat this analysis for a selection of distinct economic sectors.

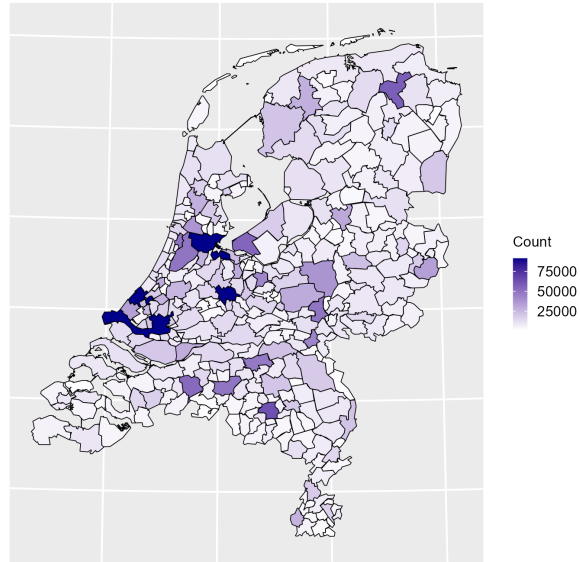
Panel statistics

In this section, we present some summary statistics on the entire panel of the FIRMBACKBONE dataset. These results are updated after every new data wave. Table 5 displays an attrition report of the organization-establishments present in the FIRMBACKBONE sample. The remaining figures show maps of the organization-establishments that enter and exit the sample at every year, both at the aggregate level and for a subset of economic sectors.

¹All employment statistics that follow are computed using the most most recent data from LISA. This is because employment statistics from LISA are much more reliable than those from KVK.

Appendix: tables and figures

Figure 1: Number of organizations (2024)



This map displays the distinct number of organizations in every municipality. If an organization has multiple establishments in the same municipality, the count increases by only one. 1% and 99% outliers are truncated to the nearest value.

Table 1: Establishments by sector (2024)

SBI	Count	Perc. (%)
A (Agriculture, forestry and fishing)	106709	2.291
B (Mining and quarrying)	1717	0.037
C (Manufacturing)	127408	2.735
D (Electricity, gas, steam and air conditioning supply)	5923	0.127
E (Water supply, sewerage, waste management and remediation activities)	5088	0.109
F (Construction)	372782	8.004
G (Wholesale and retail trade, repair of motor vehicles and motorcycles)	554207	11.899
H (Transportation and storage)	115915	2.489
I (Accommodation and food service activities)	140243	3.011
J (Information and communication)	194081	4.167
K (Financial institutions)	629930	13.525
L (Renting, buying and selling of real estate)	83944	1.802
M (Consultancy, research and other specialised business services)	772168	16.578
N (Renting and leasing of tangible assets and other business support services)	212035	4.552
O (Public administration, public services and compulsory social security)	4779	0.103
P (Education)	197149	4.233
Q (Human health and social work activities)	417556	8.965
R (Culture, sports and recreation)	254489	5.464
S (Other service activities)	461449	9.907
T (Activities of households as employers, undifferentiated goods- and service- producing activities of households for own use)	55	0.001
U (Extraterritorial organisations and bodies)	47	0.001

This table shows the number of distinct establishments by SBI sector.

Table 2: Organizations by number of establishments (2024)

Number of establishments	Count	Perc. (%)
(0,1]	4338091	97.362
(1,2]	96336	2.162
(2,5]	15759	0.354
(5,10]	2925	0.066
(10,25]	1599	0.036
(25,50]	527	0.012
(50,100]	223	0.005
(100,500]	168	0.004
(500,Inf]	8	0

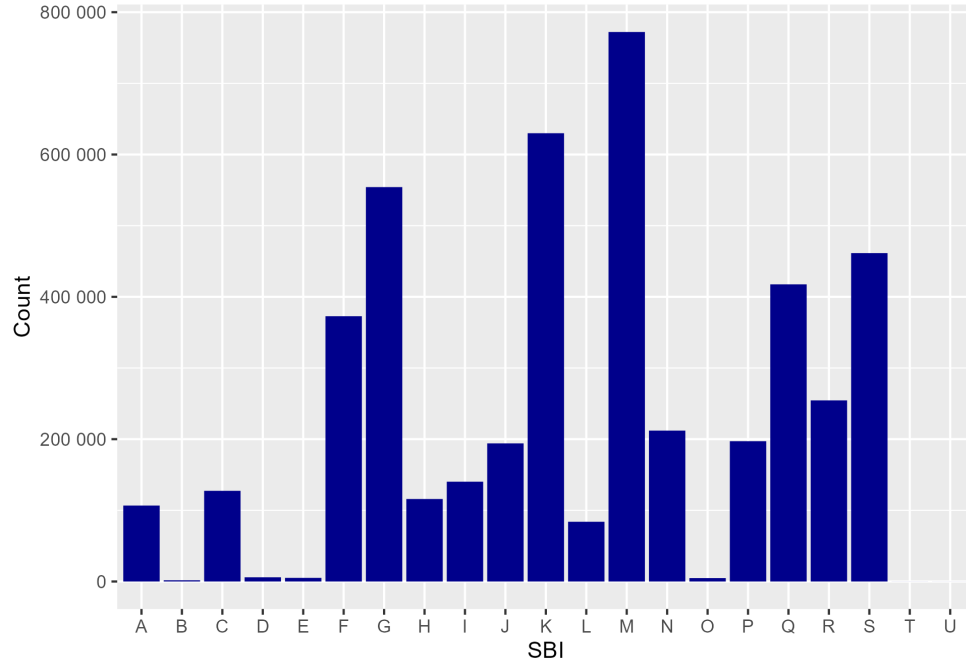
This table shows the number of organizations by their number of establishments.

Table 3: Organizations by number of employees (2024)

Number of employees	Count	Perc. (%)
(0,1]	1175637	77.695
(1,2]	137133	9.063
(2,5]	102667	6.785
(5,10]	44646	2.951
(10,25]	32413	2.142
(25,50]	11447	0.757
(50,100]	5231	0.346
(100,500]	3564	0.236
(500,Inf]	398	0.026

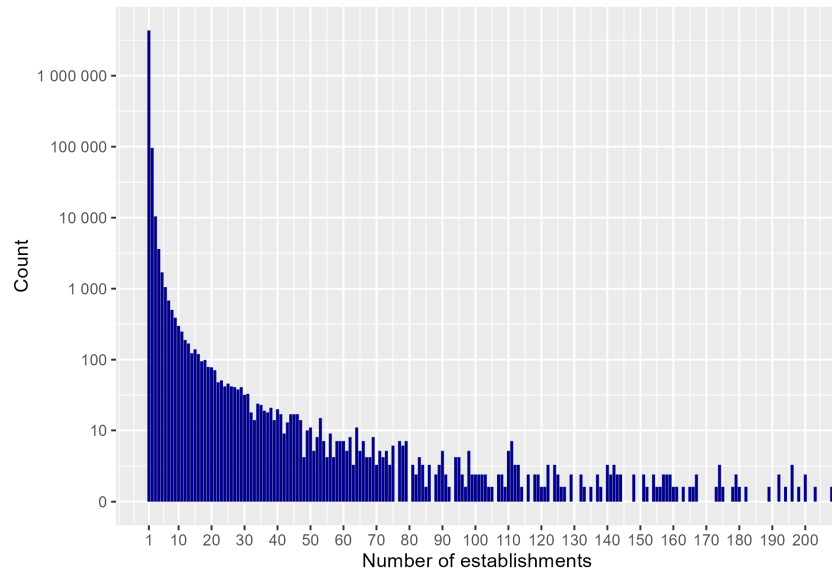
This table shows the number of organizations by their number of employees.

Figure 2: Establishments by sector (2024)



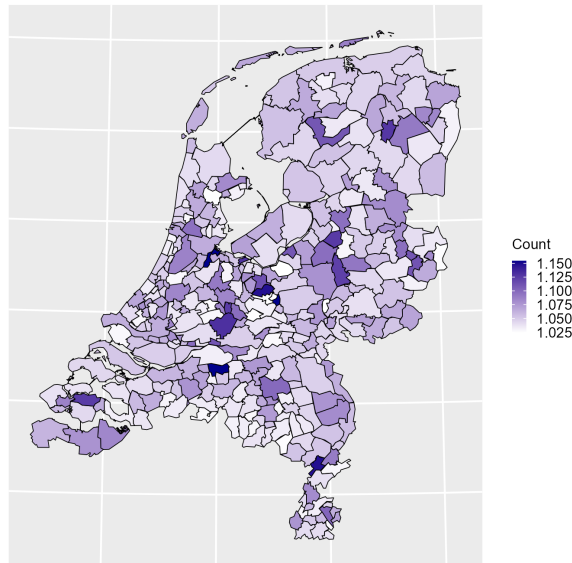
This graph displays the number of distinct establishments by SBI sector. A: Agriculture, forestry and fishing; B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam and air conditioning supply; E: Water supply, sewerage, waste management and remediation activities; F: Construction; G: Wholesale and retail trade, repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K: Financial institutions; L: Renting, buying and selling of real estate; M: Consultancy, research and other specialised business services; N: Renting and leasing of tangible assets and other business support services; O: Public administration, public services and compulsory social security; P: Education; Q: Human health and social work activities; R: Culture, sports and recreation; S: Other service activities; T: Activities of households as employers, undifferentiated goods- and service- producing activities of households for own use; U: Extraterritorial organisations and bodies.

Figure 3: Organizations by number of establishments, log scale (2024)



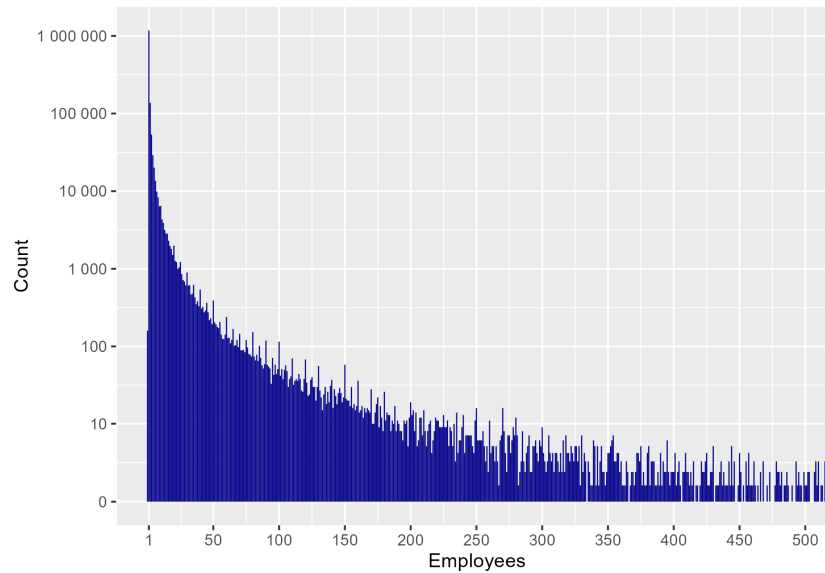
This graph displays the number of organizations by their number of establishments.

Figure 4: Mean number of organizational establishments (2024)



This map displays the average number of establishments by organizations with a headquarter in every municipality. If an organization has establishments within more than one municipality, the mean number increases only in the municipality where its headquarter is located. 1% and 99% outliers are truncated to the nearest value.

Figure 5: Organizations by number of employees, log scale (2024)



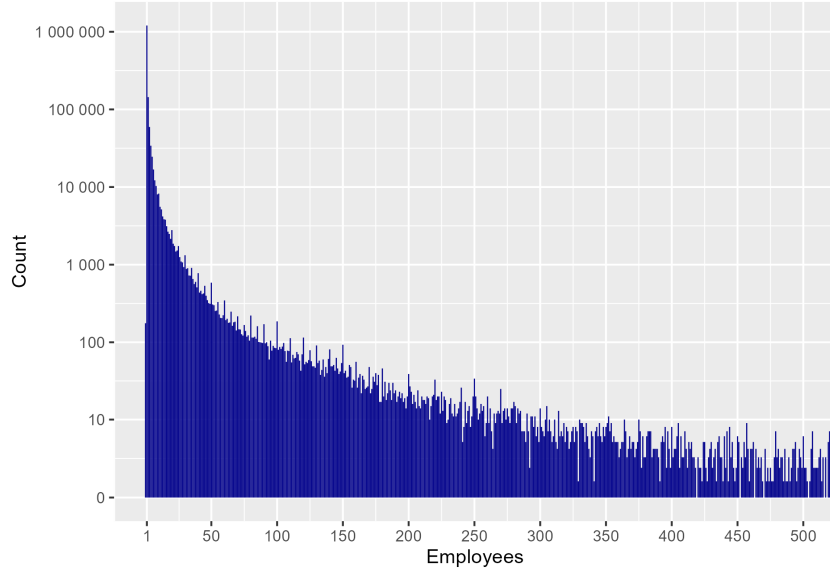
This graph displays the number of organizations by total number of their employees.

Table 4: Establishments by number of employees (2024)

Number of employees	Count	Perc. (%)
(0,1]	1204696	75.319
(1,2]	143938	8.999
(2,5]	118028	7.379
(5,10]	55599	3.476
(10,25]	44081	2.756
(25,50]	17148	1.072
(50,100]	8119	0.508
(100,500]	6953	0.435
(500,Inf]	886	0.055

This table shows the number of establishments by their number of employees.

Figure 6: Establishments by number of employees, log scale (2024)



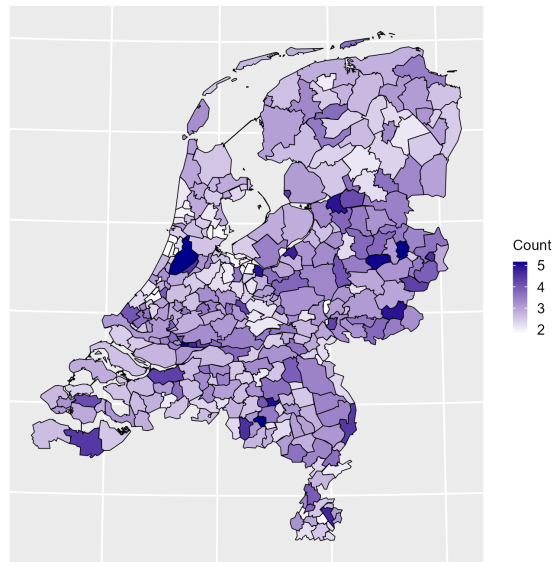
This graph displays the number of establishments by total number of their employees.

Table 5: Attrition of FIRMBACKBONE sample, by organization-establishment pair

Year	Source	Total	Survived		Exit		Entry	
		Count	Count	Perc. (%)	Count	Perc. (%)	Count	Perc. (%)
2019	LISA	1219135	NA	NA	102089	8.374	1219135	100
2020	LISA	1449907	1117046	77.043	128819	8.885	332861	22.957
2021	LISA	1516606	1321088	87.108	122561	8.081	195518	12.892
2022	LISA	1604183	1394045	86.901	817	0.051	210138	13.099
2023	KVK	4547018	1603366	35.262	45341	0.997	2943652	64.738
2024	KVK	4705925	4501677	95.66	NA	NA	204248	4.34

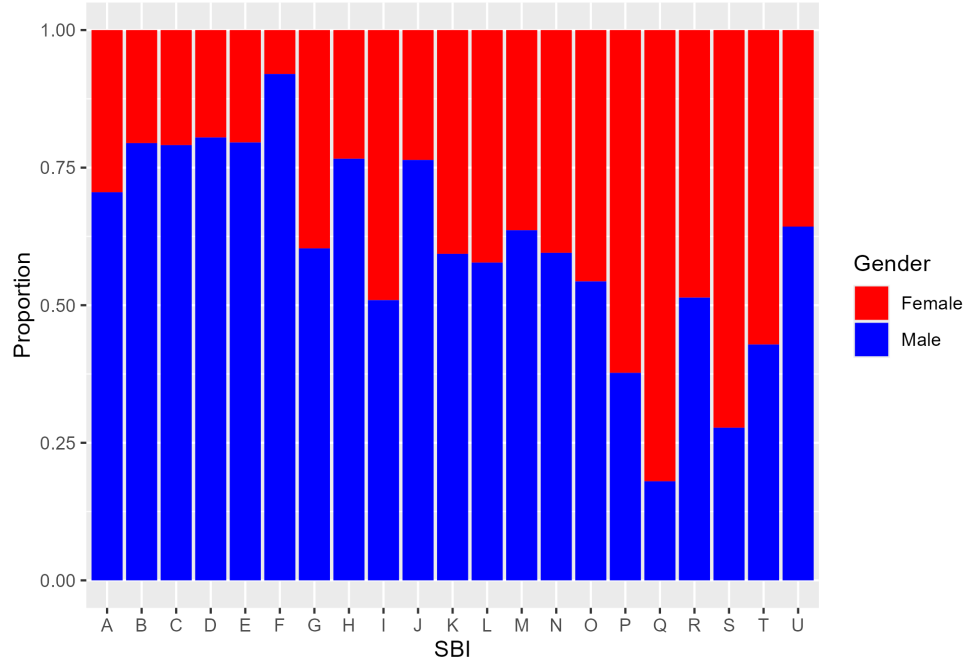
This table reports the number of observations that appear in the FIRMBACKBONE panel datasets. Each row corresponds to a specific year. The “Source” column lists the initial source of the data. If multiple sources are available for a given year, observations are combined across sources. The “Total” column reports the total number of unique observations for that year. The “Survived” columns show the total number of observations that appear in both the current and previous years. The “Exit” columns indicate the number of new observations relative to the previous year. The “Entry” columns indicate the number of new observations relative to the previous year. Numbers are presented in absolute terms and as a percentage of the total.

Figure 7: Mean number of employees in organizations (2024)



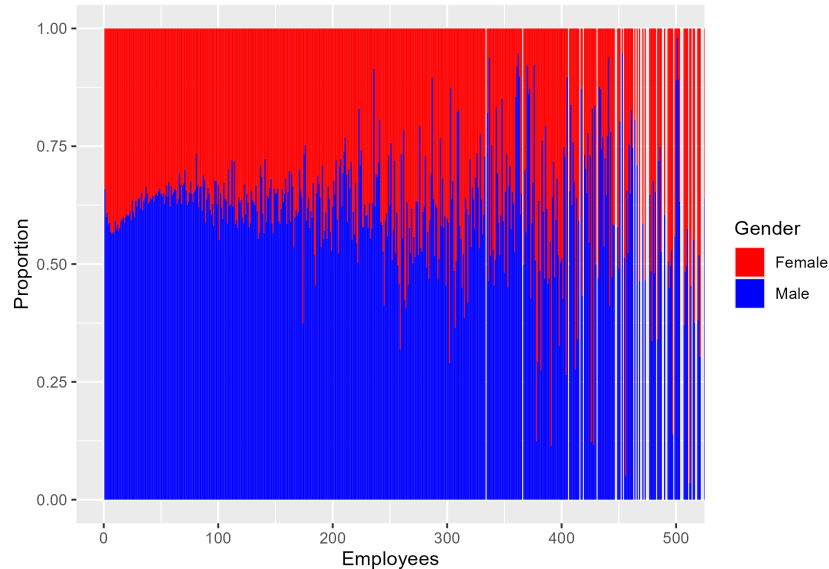
This map displays the mean number of employees by organizations with a headquarter in every municipality. If an organization has establishments within more than one municipality, the mean number increases only in the municipality where its headquarter is located. 1% and 99% outliers are truncated to the nearest value.

Figure 8: Gender distribution by sector (2024)



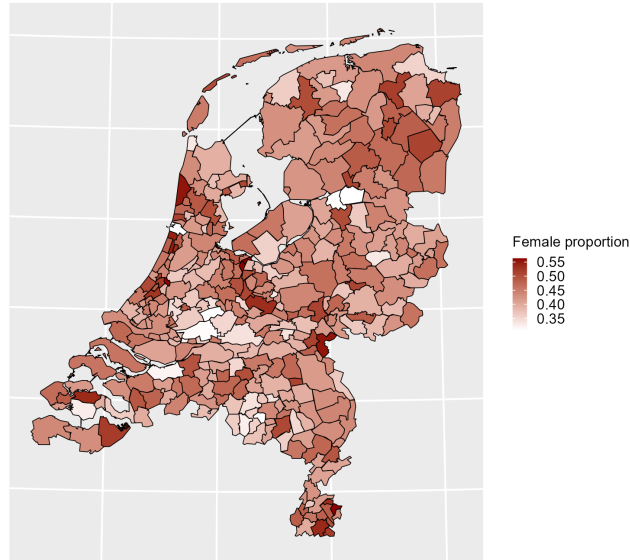
This graph displays the gender distribution of employees of organizations by SBI sector. A: Agriculture, forestry and fishing; B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam and air conditioning supply; E: Water supply, sewerage, waste management and remediation activities; F: Construction; G: Wholesale and retail trade, repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K: Financial institutions; L: Renting, buying and selling of real estate; M: Consultancy, research and other specialised business services; N: Renting and leasing of tangible assets and other business support services; O: Public administration, public services and compulsory social security; P: Education; Q: Human health and social work activities; R: Culture, sports and recreation; S: Other service activities; T: Activities of households as employers, undifferentiated goods- and service- producing activities of households for own use; U: Extraterritorial organisations and bodies.

Figure 9: Gender distribution by organizational employment size (2024)



This graph displays the gender distribution of employees of firms by total number of their employees.

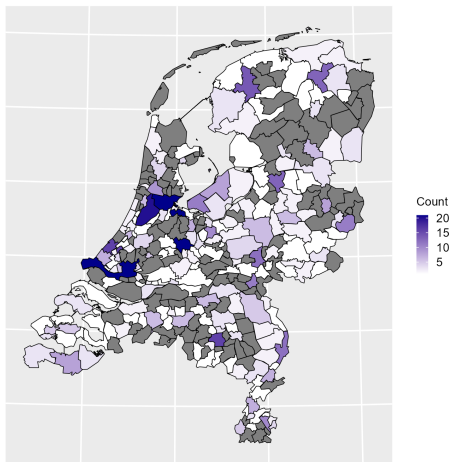
Figure 10: Gender distribution by municipality (2024)



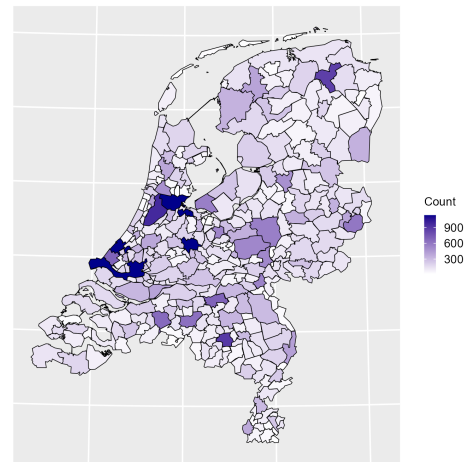
This map displays the ratio of female employees out of total employees in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 11: Number of organizations (2024)

(i) Large organizations (500 or more employees)



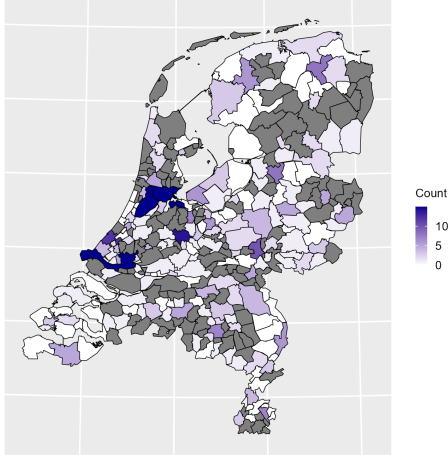
(ii) Medium organizations (10 or more employees)



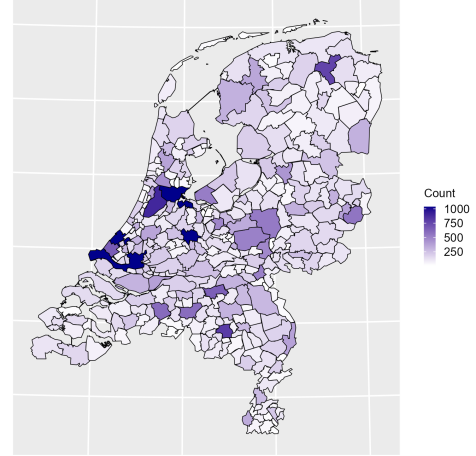
These maps display the distinct number of organizations of given size in every municipality. If an organization with a given size has multiple establishments in the same municipality, the count increases by only one. 1% and 99% outliers are truncated to the nearest value.

Figure 12: Number of headquarters (2024)

(i) Large organizations (500 or more employees)



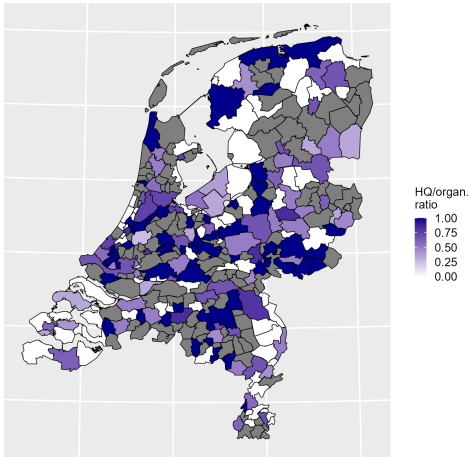
(ii) Medium organizations (10 or more employees)



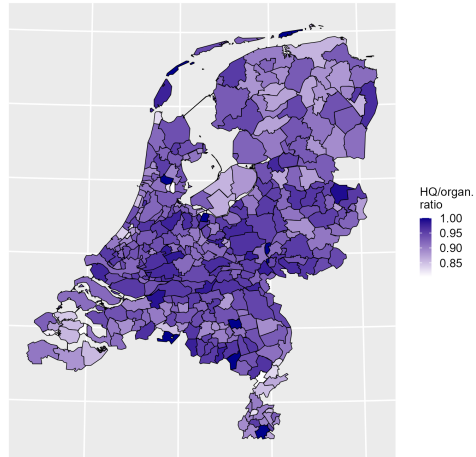
These maps display the distinct number of headquarters of organizations of given size in every municipality. If an organization with a given size has multiple headquarters in the same municipality, the count increases by only one. 1% and 99% outliers are truncated to the nearest value.

Figure 13: Prevalence of large organization headquarters (2024)

(i) Large organizations (500 or more employees)



(ii) Medium organizations (10 or more employees)



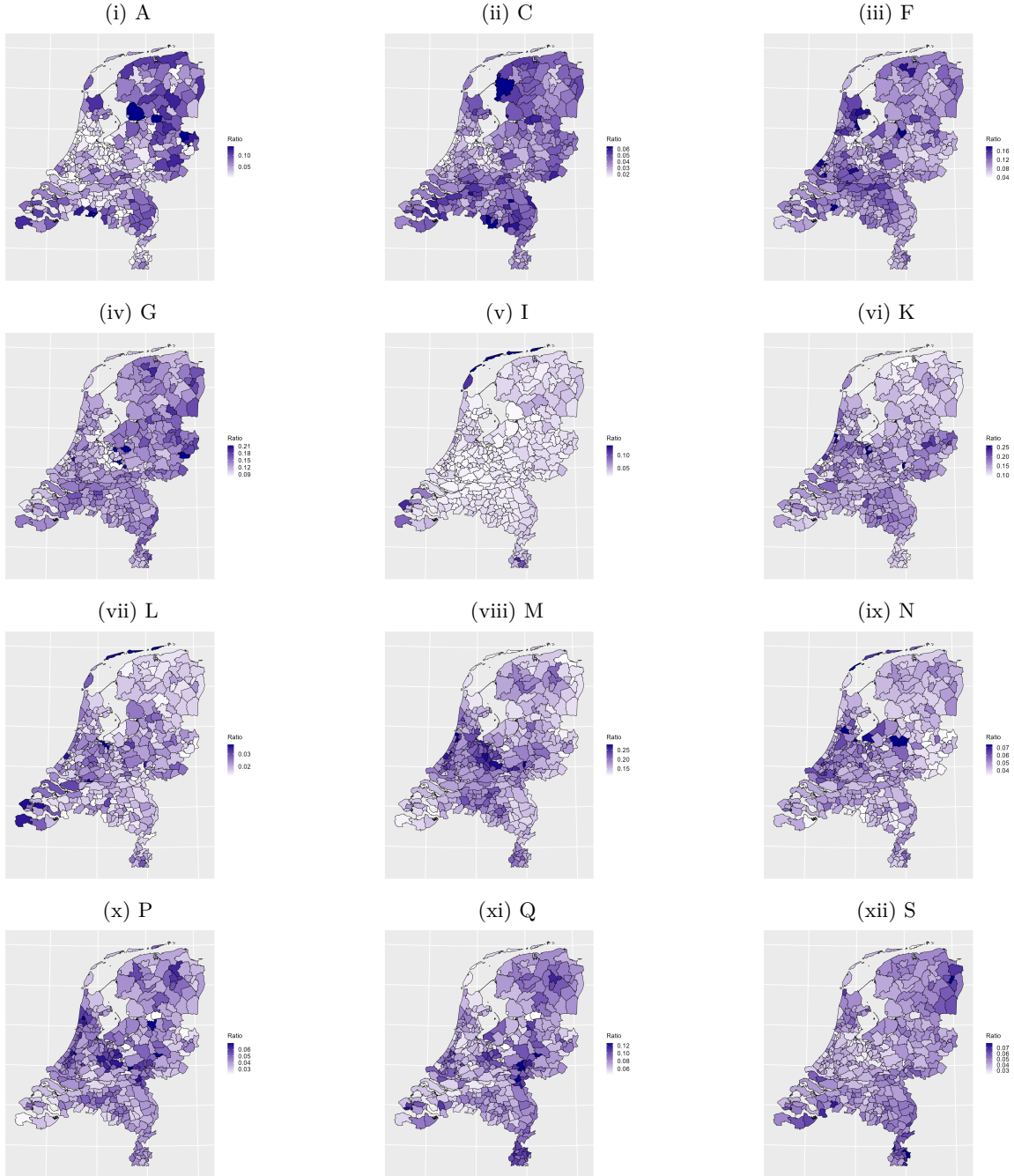
These maps display the ratio between the number of distinct headquarters and the number of distinct organizations of given size in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 14: Location of organizations by sector (2024)



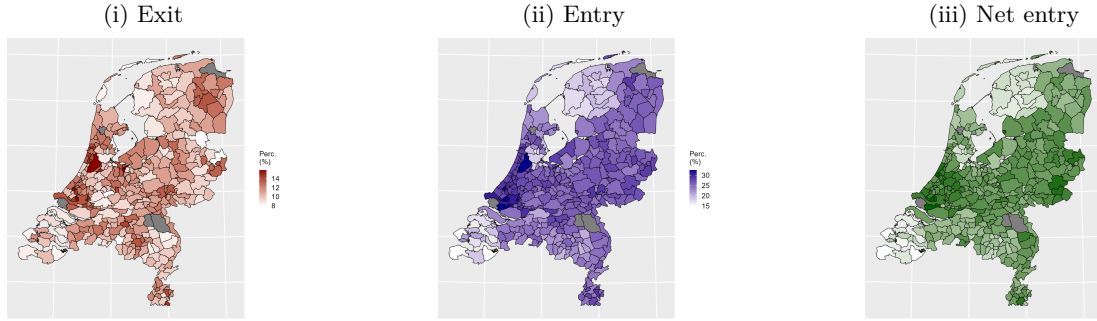
These maps display the distinct number of organizations of the given SBI sector in every municipality. 1% and 99% outliers are truncated to the nearest value. A: Agriculture, forestry and fishing; B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam and air conditioning supply; E: Water supply, sewerage, waste management and remediation activities; F: Construction; G: Wholesale and retail trade, repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K: Financial institutions; L: Renting, buying and selling of real estate; M: Consultancy, research and other specialised business services; N: Renting and leasing of tangible assets and other business support services; O: Public administration, public services and compulsory social security; P: Education; Q: Human health and social work activities; R: Culture, sports and recreation; S: Other service activities; T: Activities of households as employers, undifferentiated goods- and service- producing activities of households for own use; U: Extraterritorial organisations and bodies.

Figure 15: Headquarter prevalence by sector (2024)



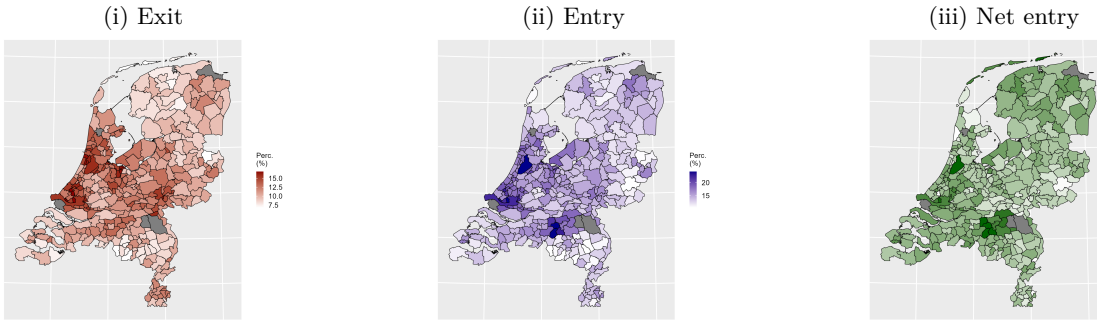
These maps display the ratio between the number of headquarters of the given SBI sector and the total number of headquarters in every municipality. 1% and 99% outliers are truncated to the nearest value. A: Agriculture, forestry and fishing; B: Mining and quarrying; C: Manufacturing; D: Electricity, gas, steam and air conditioning supply; E: Water supply, sewerage, waste management and remediation activities; F: Construction; G: Wholesale and retail trade, repair of motor vehicles and motorcycles; H: Transportation and storage; I: Accommodation and food service activities; J: Information and communication; K: Financial institutions; L: Renting, buying and selling of real estate; M: Consultancy, research and other specialised business services; N: Renting and leasing of tangible assets and other business support services; O: Public administration, public services and compulsory social security; P: Education; Q: Human health and social work activities; R: Culture, sports and recreation; S: Other service activities; T: Activities of households as employers, undifferentiated goods- and service- producing activities of households for own use; U: Extraterritorial organisations and bodies.

Figure 16: Organizations exit and entry (2019-2020)



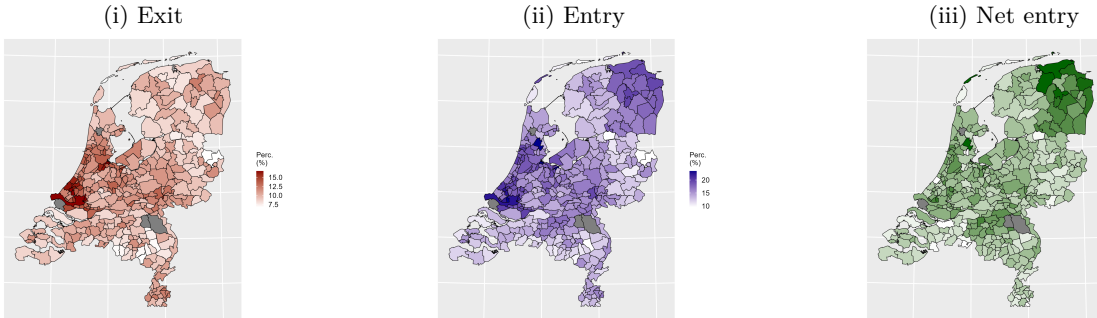
These maps display the exit, entry, and net entry rates of organizations in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 17: Organizations exit and entry (2020-2021)



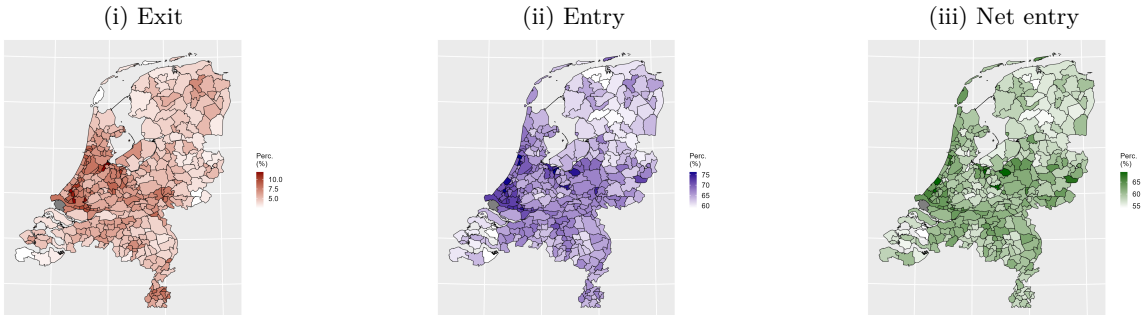
These maps display the exit, entry, and net entry rates of organizations in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 18: Organizations exit and entry (2021-2022)



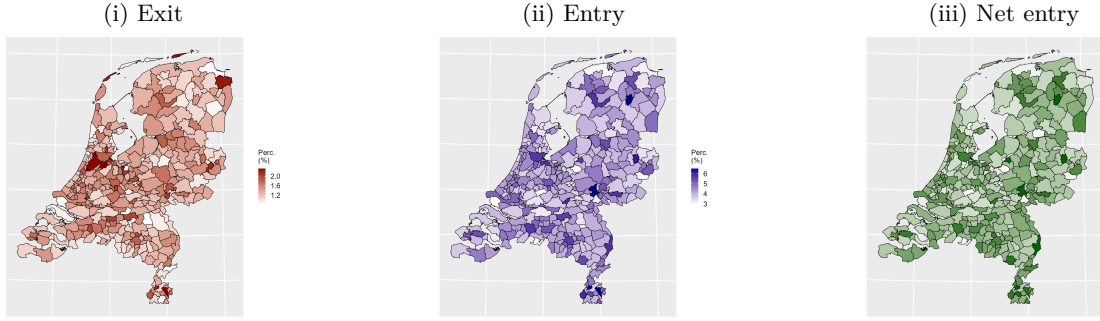
These maps display the exit, entry, and net entry rates of organizations in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 19: Organizations exit and entry (2022-2023)



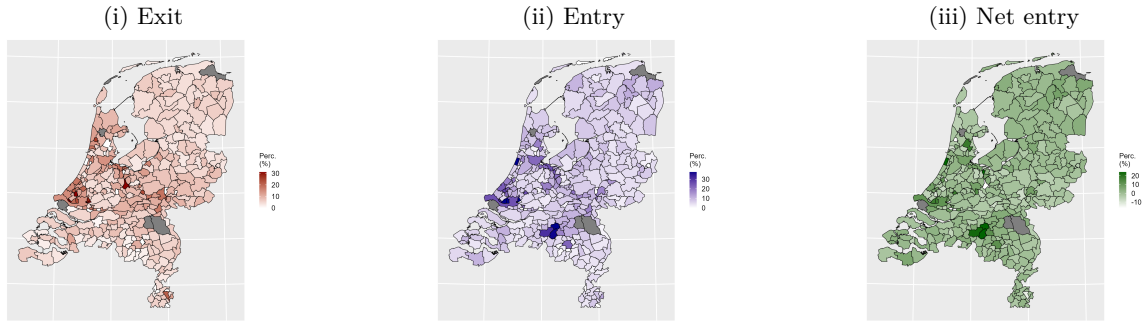
These maps display the exit, entry, and net entry rates of organizations in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 20: Organizations exit and entry (2023-2024)



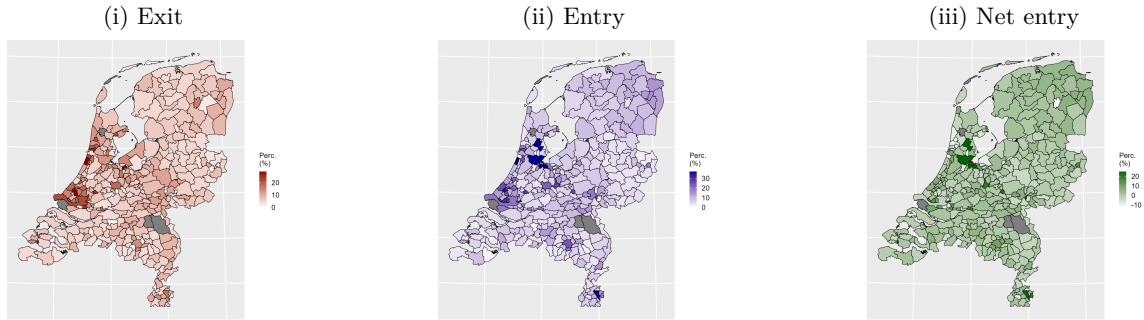
These maps display the exit, entry, and net entry rates of organizations in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 21: Organizations exit and entry in sector A (2020-2021)



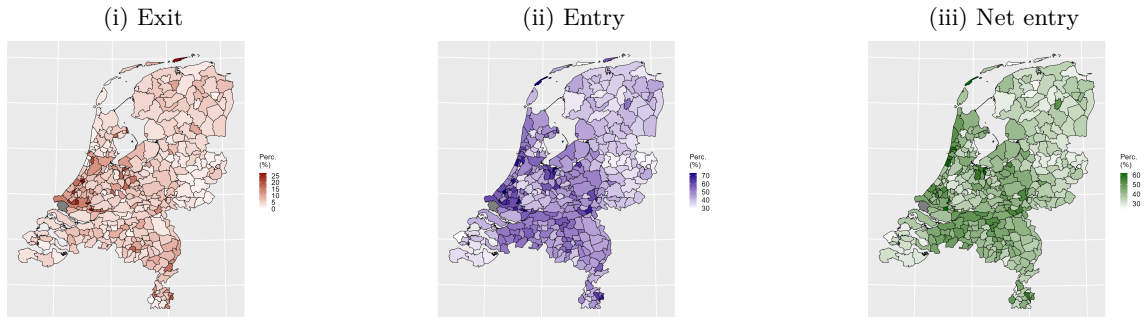
These maps display the exit, entry, and net entry rates of organizations with SBI code A (Agriculture, forestry and fishing) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 22: Organizations exit and entry in sector A (2021-2022)



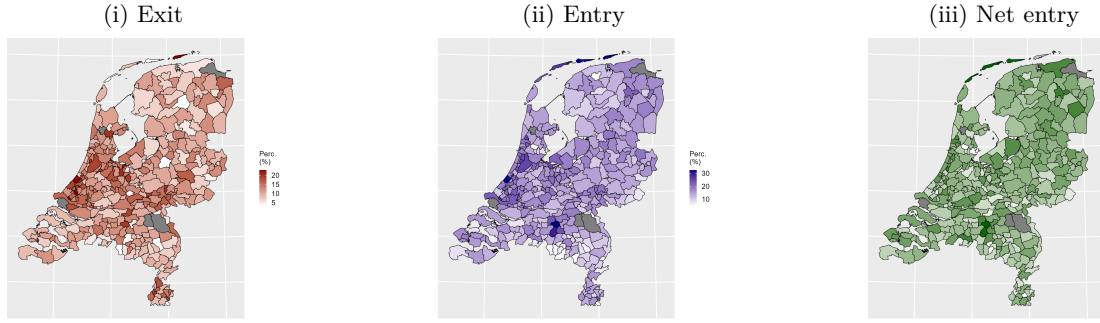
These maps display the exit, entry, and net entry rates of organizations with SBI code A (Agriculture, forestry and fishing) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 23: Organizations exit and entry in sector A (2022-2023)



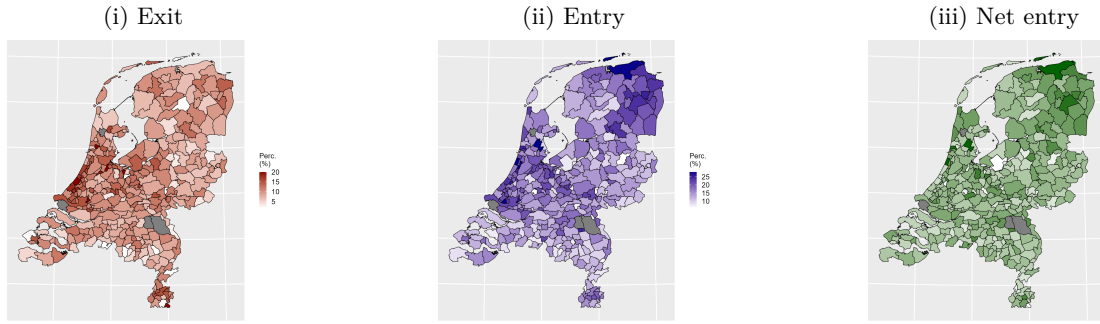
These maps display the exit, entry, and net entry rates of organizations with SBI code A (Agriculture, forestry and fishing) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 24: Organizations exit and entry in sector C (2020-2021)



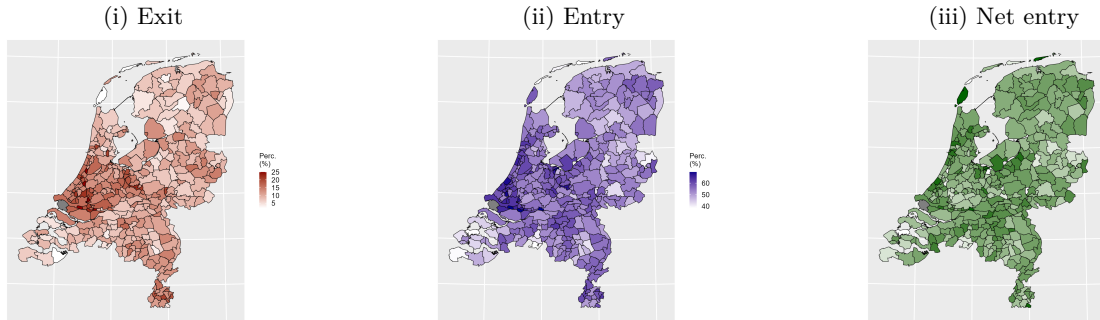
These maps display the exit, entry, and net entry rates of organizations with SBI code C (Manufacturing) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 25: Organizations exit and entry in sector C (2021-2022)



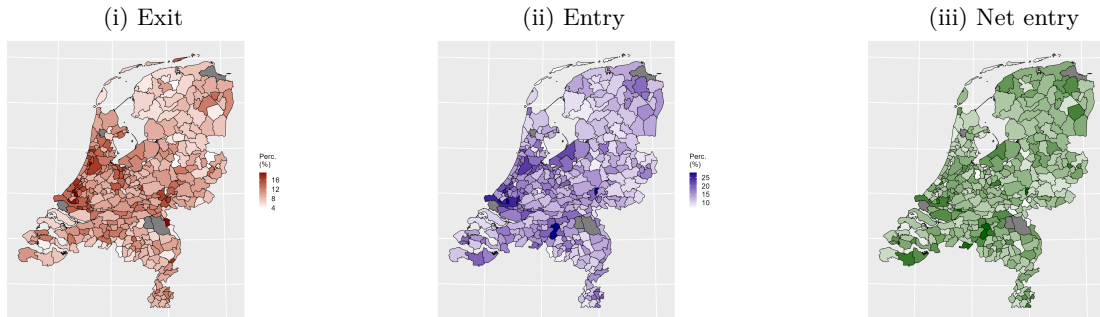
These maps display the exit, entry, and net entry rates of organizations with SBI code C (Manufacturing) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 26: Organizations exit and entry in sector C (2022-2023)



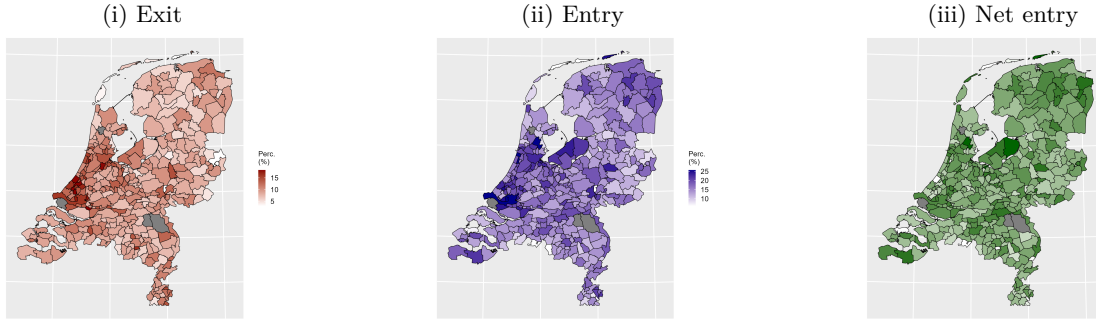
These maps display the exit, entry, and net entry rates of organizations with SBI code C (Manufacturing) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 27: Organizations exit and entry in sector F (2020-2021)



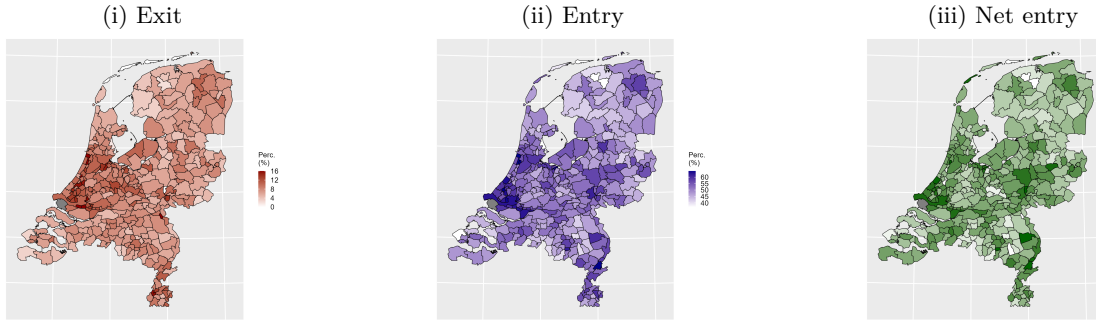
These maps display the exit, entry, and net entry rates of organizations with SBI code F (Construction) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 28: Organizations exit and entry in sector F (2021-2022)



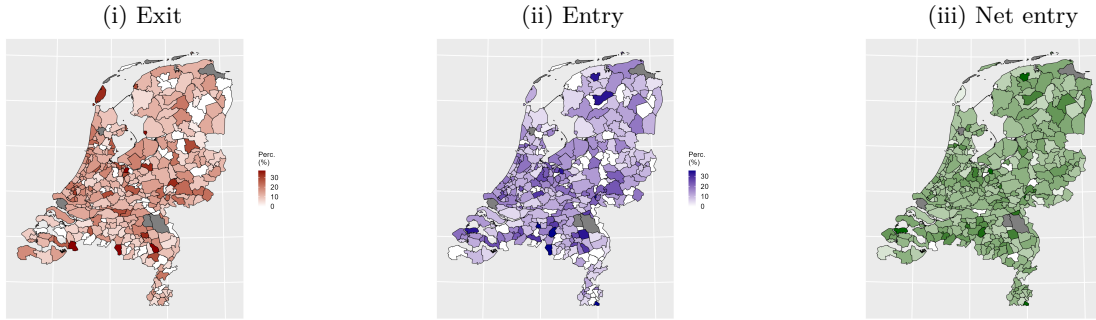
These maps display the exit, entry, and net entry rates of organizations with SBI code F (Construction) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 29: Organizations exit and entry in sector F (2022-2023)



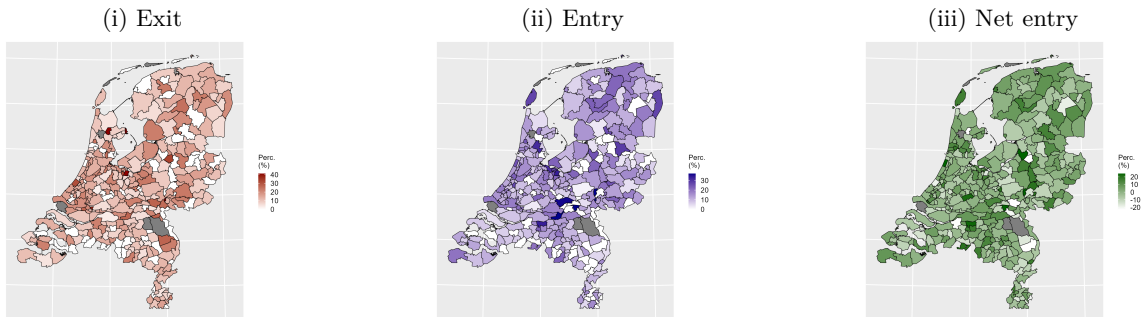
These maps display the exit, entry, and net entry rates of organizations with SBI code F (Construction) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 30: Organizations exit and entry in sector K (2020-2021)



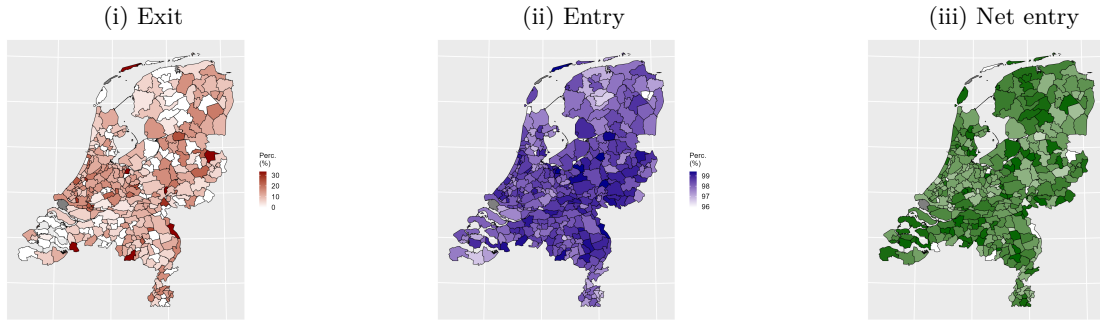
These maps display the exit, entry, and net entry rates of organizations with SBI code K (Financial institutions) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 31: Organizations exit and entry in sector K (2021-2022)



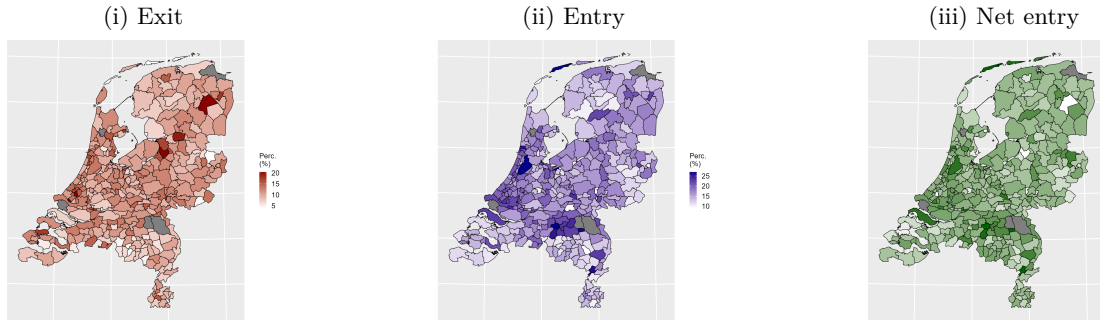
These maps display the exit, entry, and net entry rates of organizations with SBI code K (Financial institutions) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 32: Organizations exit and entry in sector K (2022-2023)



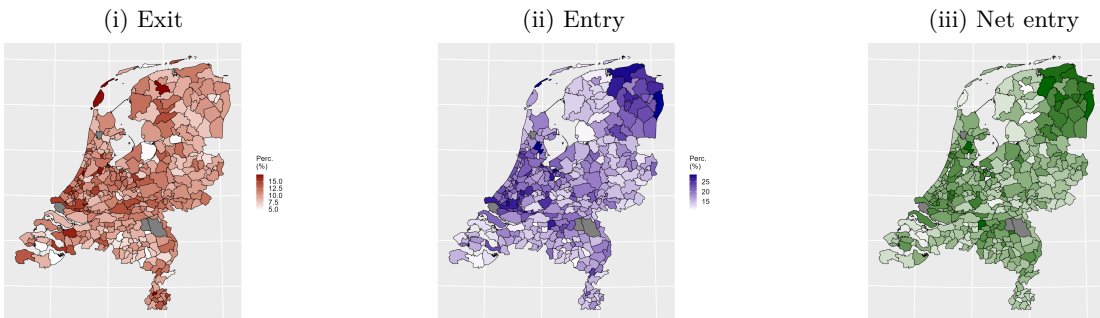
These maps display the exit, entry, and net entry rates of organizations with SBI code K (Financial institutions) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 33: Organizations exit and entry in sector Q (2020-2021)



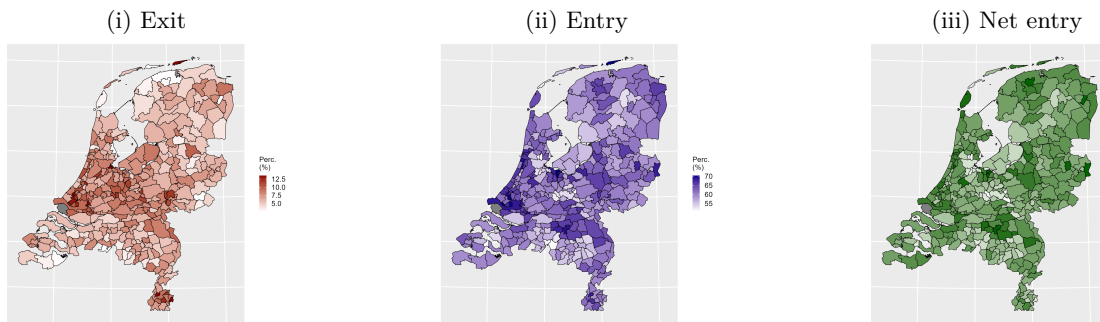
These maps display the exit, entry, and net entry rates of organizations with SBI code Q (Human health and social work activities) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 34: Organizations exit and entry in sector Q (2021-2022)



These maps display the exit, entry, and net entry rates of organizations with SBI code Q (Human health and social work activities) in every municipality. 1% and 99% outliers are truncated to the nearest value.

Figure 35: Organizations exit and entry in sector Q (2022-2023)



These maps display the exit, entry, and net entry rates of organizations with SBI code Q (Human health and social work activities) in every municipality. 1% and 99% outliers are truncated to the nearest value.