

Appendix

Table 4. List of firms by main industries and number of observations

Industries	Number of firms	Number of firms with websites	Share of firms with websites in %
Apparatus construction	1,383	465	33.6
Optician	11,792	5,451	46.2
Concrete building	6,086	2,724	44.8
Well construction	857	376	43.9
Bookbinder	972	349	35.9
Baker	23,219	4,486	19.3
Roofer	11,957	4,819	40.3
Electrician	19,621	5,532	28.2
Butcher	14,806	2,827	19.1
Floor tiler	9,629	2,384	24.8
Hairdresser	25,486	4,703	18.5
Building cleaner	8,771	3,520	40.1
Scaffolder	3,117	990	31.8
Glazier	6,471	3,097	47.9
Goldsmith	3,295	1,006	30.5
Engraver	738	229	31.0
Heating engineer	19,237	6,171	32.1
Audiologist	5,485	2,549	46.5
Installer	4,931	2,523	51.2
Automotive mechatronics engineer	16,528	4,921	29.8
Plumber	13,364	4,099	30.7
Confectionist	1,669	453	27.1
Furrier	261	65	24.9
Painter	14,696	5,086	34.6
Mason	2,227	877	39.4
Custom tailor	159	82	51.6
Organ maker	272	63	23.2
Orthopedic technician	4,858	1,833	37.7
Interior decorator	8,437	2,487	29.5
Plumbing Electrician	1,586	793	50.0
Heating engineering	20,138	5,701	28.3
Plumbing and heating installer	13,019	4,299	33.0
Smith	5,697	1,398	24.5
Chimney sweeper	4,803	609	12.7
Shoemaker	2,009	367	18.3
Stone carver	4,473	1,548	34.6
Roadmaking	6,948	1,714	24.7
Plasterer	4,180	1,115	26.7
Dry-cleaner	3,427	758	22.1
Cabinetmaker	17,135	5,189	30.3
Ceramist	437	101	23.1
Clocksmith	1,557	349	22.4
Carpenter	9,937	2,842	28.6
Bicycle mechanic	10,691	3,510	32.8
No. of observations / share	346,361	104,460	30.2

Table 5. List and description of variables

Name	Description	Calculation	Survey year
Website prevalence	Firm is running a website	Firm is running a website = “1” or not = “0”	2018
HTML_5	Firm’s website is using Hyper Text Markup Language 5	Firm is using HTML 5 = “1” or not = “0”	2018
Facebook	Firm has linked its Facebook profile to the website	Firm has linked its Facebook profile to the website = “1” or not = “0”	2018
Instagram	Firm has linked its Instagram profile to the website	Firm has linked its Instagram profile to the website = “1” or not = “0”	2018
Twitter	Firm has linked its Twitter profile to the website	Firm has linked its Twitter profile to the website = “1” or not = “0”	2018
https	Firm is using Hypertext Transfer Protocol Secure	Firm is using Hypertext Transfer Protocol Secure = “1” or not = “0”	2018
Last modification 2018	Firm’s website was updated lastly in 2018	Firm’s website was updated lastly in 2018 = “1” or not = “0”	2018
Broadband internet	Share of households with access to broadband internet over 50 Mbit/s in 2017	Number of households with access to broadband internet / number of all households in the county	2017
Population density	Inhabitants per km ²	Inhabitants / km ²	2015
Share of employees without professional qualification	Share of employees without professional qualification of all employees at place of residence in %	Employees without professional qualification at place of residents / all employees at place of residence x 100	2015
Share of employees with academic education (university or applied college)	Share of employees with academic education of all employees at place of residence in %	Employees with academic education at place of residence / all employees at place of residence x 100	2015
Sales revenue in craft sector	Sales revenue of craft companies in 1,000 € per employee	Sales revenue in craft sector / number of employees	2014
GDP per capita	GDP in 1,000 € per capita	GDP / number of inhabitants / 1,000	2015
Birth Rate	Increase or decrease of number of births in %	Number of births <2014> - number of births <2011> / Number of births <2011> x 100	2011, 2014
Rate of (internal) out-migration per region	Emigrants per 1,000 inhabitants in a given region	Out-migration / number of inhabitants x 1,000	2015
Rate of internal in-migration per region	Immigrants per 1,000 inhabitants in a given region	Internal immigrants / number of inhabitants x 1,000	2015
Increase / Decrease of inhabitants aged 65+	Development of number of inhabitants 65 years or older in %	(inhabitants >= 65 years <2015> - inhabitants >= 65 years <2011>) / inhabitants >= 65 years <2011> x 100	2011-2015
Employees in craft sector overall	Share of employees working in crafts companies of all employees in %	Employees in crafts sector / all employees x 100	2014
Firm Size	Average number of employees per firm by industry and county	Average number of employees per firm by industry and county	2018

Source of data: Webscraping of Yellow Pages (06/2018), INKAR Database (www.inkar.de; last accessed 03.02.2020); Statistical Offices of the German federal states.

Table 6. Descriptive statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
Website prevalence	346,361	0.30	0.46	0	1
HTML_5	96,149	0.57	0.50	0	1
Facebook	96,149	0.31	0.46	0	1
Instagram	96,149	0.05	0.22	0	1
Twitter	96,149	0.17	0.38	0	1
https	96,149	0.30	0.46	0	1
Last modification 2018	346,361	0.01	0.12	0	1
Broadband internet (over 50 MB in 2017)	299,722	75.59	15.40	19.7	99.7
Population density	299,681	717.24	918.70	36	3,947
Share of employees with acad. education	299,681	13.14	6.20	5.14	40.03
Share of employees without formal educ.	299,681	12.18	2.55	4.15	19.04
Sales revenue in craft sector	297,057	100.64	19.14	59.07	199.30
GDP per capita	299,681	36.17	14.95	15.34	130.85
Birth rate	299,681	11.46	5.60	-10.28	33.00
Rate of reg. out-migration	299,681	51.07	26.75	22.95	339.85
Rate of reg. in-migration	299,681	65.26	29.48	28.96	363.04
Increase / Decrease of inhabitants aged 65+	299,681	4.56	2.24	-0.94	10.38
Employees in craft sector overall	299,681	13.79	4.61	4.09	52.81
Firm size	340,814	11	13.1	0	274
Apparatus construction	346,361	0.004	0.06	0	1
Optician	346,361	0.03	0.18	0	1
Concrete building	346,361	0.02	0.13	0	1
Well construction	346,361	0.002	0.05	0	1
Bookbinder	346,361	0.003	0.05	0	1
Baker	346,361	0.07	0.25	0	1
Roofer	346,361	0.03	0.18	0	1
Electrician	346,361	0.06	0.23	0	1
Butcher	346,361	0.04	0.20	0	1
Floor tiler	346,361	0.03	0.16	0	1
Hairdresser	346,361	0.07	0.26	0	1
Building cleaner	346,361	0.03	0.16	0	1
Scaffolder	346,361	0.009	0.09	0	1
Glazier	346,361	0.02	0.14	0	1
Goldsmith	346,361	0.01	0.10	0	1
Engraver	346,361	0.002	0.05	0	1
Heating engineer	346,361	0.06	0.23	0	1
Audiologist	346,361	0.02	0.12	0	1
Installer	346,361	0.01	0.12	0	1
Automotive mechatronics engineer	346,361	0.05	0.21	0	1
Plumber	346,361	0.04	0.19	0	1
Confectionist	346,361	0.005	0.07	0	1
Furrier	346,361	0.001	0.03	0	1
Painter	346,361	0.04	0.20	0	1

Mason	346,361	0.006	0.08	0	1
Custom tailor	346,361	0.0004	0.02	0	1
Organ maker	346,361	0.001	0.03	0	1
Orthopedic technician	346,361	0.01	0.12	0	1
Interior decorator	346,361	0.02	0.15	0	1
Plumbing electrician	346,361	0.005	0.07	0	1
Heating engineering	346,361	0.06	0.23	0	1
Plumbing and heating installer	346,361	0.04	0.19	0	1
Smith	346,361	0.02	0.13	0	1
Chimney sweeper	346,361	0.01	0.12	0	1
Shoemaker	346,361	0.006	0.08	0	1
Stone carver	346,361	0.01	0.11	0	1
Roadmaking	346,361	0.02	0.14	0	1
Plasterer	346,361	0.01	0.11	0	1
Dry-cleaner	346,361	0.01	0.10	0	1
Cabinetmaker	346,361	0.05	0.22	0	1
Ceramist	346,361	0.001	0.04	0	1
Clocksmith	346,361	0.004	0.07	0	1
Carpenter	346,361	0.03	0.17	0	1
Bicycle mechanic	346,361	0.03	0.17	0	1

Table 7. Full regression output to explain website prevalence

	All, excl. broadband internet	All	Rural	Semi-urban	Urban
Broadband internet (over 50 MB in 2017)	-	0.0004*	0.0040***	-0.0017***	-0.00471***
Population density	0.0001***	0.0001***	-0.0001***	0.00003***	0.0001***
Share of employees with acad. education	0.0074***	0.0071***	0.0064***	0.0135***	-0.0021*
Share of employees without formal educ.	-0.0112***	-0.0116***	-0.0231***	-0.0003	-0.0562***
Sales revenue in craft sector	0.0022***	0.0022***	0.0030***	-0.001***	0.0024***
GDP per capita	-0.0030***	-0.0030***	0.0013***	-0.0013***	-0.0023***
Birth rate	0.0032***	0.0031***	-0.0004*	-0.0024***	0.0085***
Rate of reg. in-migration	0.0001***	0.0001*	-0.0005***	0.0007***	0.0010***
Increase / Decrease of inhabitants aged 65+	-0.0157***	-0.0158***	0.0110***	-0.0125***	-0.0484***
Employees in craft sector overall	-0.0028***	-0.0024***	0.0006	0.0128***	-0.0109***
Firm Size	0.0016***	0.0016***	-0.0001	0.0023***	0.0013**
Apparatus construction	0.0884***	0.0880***	0.1170*	-0.0417***	0.133***
Optician	0.212***	0.212***	0.2390***	0.117***	0.231***
Concrete building	0.214***	0.215***	0.255***	0.103***	0.239***
Well construction	-	-	-	-	-
Bookbinder	0.0938***	0.0938***	0.111***	-0.0390***	0.137***
Baker	-0.0932***	-0.0917***	0.005	-0.200***	-0.0815***
Roofer	0.181***	0.181***	0.211***	0.0736***	0.199***
Electrician	0.0502***	0.0506***	0.0536***	-0.0427***	0.0877***
Butcher	-0.0429***	-0.0417***	0.0141**	-0.139***	-0.0201**
Floor tiler	0.0350***	0.0349***	0.0543***	-0.0536***	0.0522***
Hairdresser	-0.0644***	-0.0646***	-0.0359***	-0.128***	-0.0693***
Building cleaner	0.102***	0.103***	0.193***	0.0089	0.108***
Scaffolder	0.0794***	0.0799***	0.120***	-0.0396***	0.122***
Glazier	0.243***	0.242***	0.245***	0.124***	0.287***
Goldsmith	0.0635***	0.0631***	0.0812***	-0.0789***	0.107***
Engraver	0.0697***	0.0697***	0.0908***	-0.0558***	0.109***
Heating engineer	0.0902***	0.0903***	0.0778***	-0.0133***	0.149***
Audiologist	0.208***	0.207***	0.286***	0.122***	0.197***
Installer	0.271***	0.271***	0.187***	0.164***	0.270***
Automotive mechatronics engineer	0.0600***	0.0605***	0.0821***	-0.0175***	0.0784***
Plumber	0.0760***	0.0759***	0.0733***	-0.0542***	0.124***
Confectionist	0.0335***	0.0339***	0.0066	-0.154***	0.152***
Furrier	-	-	-	-0.130***	0.0623***
Painter	0.102***	0.102***	0.0935***	0.0356***	0.113***
Mason	0.147***	0.147***	0.240***	0.0469***	0.149***
Custom tailor	0.171***	0.171***	0.147***	-	0.219***
Organ maker	0.0212***	0.0218***	0.0446***	-0.0630***	-
Orthopedic technician	0.110***	0.111***	0.173***	-0.0091	0.146***
Interior decorator	0.0768***	0.0768***	0.125***	-0.0533***	0.109***
Plumbing electrician	0.280***	0.280***	0.235***	0.188***	0.296***
Heating engineering	0.0468***	0.0468***	0.0250***	-0.0028	0.0639***
Plumbing and heating installer	0.104***	0.104***	0.0986***	-0.0232***	0.152***
Smith	0.0242***	0.0243***	0.0340***	-0.119***	0.0811***
Chimney sweeper	-0.0822***	-0.0820***	-0.0298***	-0.173***	-0.0836***
Shoemaker	-0.0752***	-0.0755***	-0.0028	-0.169***	-0.0582***
Stone carver	0.124***	0.124***	0.159***	0.0091***	0.171***
Roadmaking	0.00131	0.0022	0.133***	-0.161***	0.0186
Plasterer	0.0309***	0.0312***	0.115***	-0.089***	0.0559***
Dry-cleaner	-0.0565***	-0.0563***	0.0341***	-0.164***	-0.0549***
Cabinetmaker	0.0846***	0.0852***	0.0764***	-0.0162***	0.138***
Ceramist	0.004	0.0047	0.0525***	-0.0851***	0.0118***
Clocksmith	0.0141***	0.0138***	0.0051**	-0.106***	0.0860***
Carpenter	0.850***	0.0857***	0.0964***	-0.0278***	0.154***
Bicycle mechanic	0.0984***	0.984***	0.103***	0.0138***	0.129***
Constant	0.161***	0.183***	-0.291***	0.286***	1.373***
Observations	296,228	296,228	73,948	93,376	128,901
R ²	0.07	0.07	0.10	0.06	0.11

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 8. Full regression output, building cleaner and bakeries dropped

	All, excl. Broadb.Inter.	All	Rural	Semi-urban	Urban
Broadband internet (over 50 MB in 2017)	-	0.0004**	0.0040***	-0.0018***	-0.0047***
Population density	0.0001***	0.0001***	-0.0001***	0.00003***	0.0001***
Share of employees with acad. education	0.0076***	0.0073***	0.0069***	0.0136***	-0.0023*
Share of employees without formal educ.	-0.0107***	-0.0112***	-0.0231***	0.0002	-0.0559***
Sales revenue in craft sector	0.0022***	0.0022***	0.0030***	-0.0011***	0.0025***
GDP per capita	-0.0028***	-0.0028***	0.0014***	-0.0012**	-0.0020***
Birth rate	0.0031***	0.0030***	-0.0004	-0.0024***	0.0083***
Rate of reg. in-migration	0.0001	0.0001	-0.0006***	0.0007***	0.0010***
Increase/Decrease of inhabitants aged 65+	-0.0149***	-0.0149***	0.0109***	-0.0114***	-0.0476***
Employees in craft sector overall	-0.0028***	-0.0024***	0.0006	0.0129***	-0.0105***
Firm Size	0.0025**	0.0024**	-0.0001	0.0034**	0.0022
Apparatus construction	0.0888***	0.0884***	0.0683***	0.0883***	0.132***
Optician	0.210***	0.210***	0.191***	0.244***	0.229***
Concrete building	0.209***	0.210***	0.207***	0.224***	0.232***
Well construction	-	-	-	-	-
Bookbinder	0.0936***	0.0937***	0.0624***	0.0908***	0.136***
Baker	-	-	-	-	-
Roofer	0.181***	0.181***	0.162***	0.201***	0.197***
Electrician	0.0468***	0.0473***	0.00537**	0.0817***	0.0818***
Butcher	-0.0524***	-0.0508***	-0.0340***	-0.0244	-0.0318
Floor tiler	0.0383***	0.0383***	0.00612	0.0792***	0.0543***
Hairdresser	-0.0624***	-0.0627***	-0.0841***	0.00161	-0.0676***
Building cleaner	-	-	-	-	-
Scaffolder	0.0760***	0.0767***	0.0719***	0.0857***	0.116***
Glazier	0.241***	0.241***	0.196***	0.251***	0.285***
Goldsmith	0.0649***	0.0644***	0.0327***	0.0514***	0.108***
Engraver	0.0709***	0.0709***	0.0423***	0.0748***	0.109***
Heating engineer	0.0890***	0.0892***	0.0296***	0.113***	0.146***
Audiologist	0.203***	0.203***	0.237***	0.244***	0.192***
Installer	0.269***	0.269***	0.139***	0.288***	0.267***
Automotive mechatronics engineer	0.0563***	0.0569***	0.0340***	0.106***	0.0726***
Plumber	0.0753***	0.0752***	0.0250***	0.0730***	0.122***
Confectionist	0.0238*	0.0244*	-0.0420***	-0.0373**	0.142***
Furrier	-	-	-0.0487***	-	0.0613***
Painter	0.102***	0.102***	0.0454***	0.164***	0.112***
Mason	0.140***	0.141***	0.192***	0.168***	0.139***
Custom tailor	0.171***	0.171***	0.0982***	0.131***	0.221***
Organ maker	0.0236***	0.0244***	-0.00362	0.0680***	-
Orthopedic technician	0.0886***	0.0899***	0.125***	0.0896**	0.122***
Interior decorator	0.0789***	0.0788***	0.0764***	0.0779***	0.109***
Plumbing electrician	0.278***	0.278***	0.186***	0.313***	0.294***
Heating engineering	0.0457***	0.0457***	-0.0231***	0.123***	0.0619***
Plumbing and heating installer	0.102***	0.102***	0.0503***	0.103***	0.149***
Smith	0.0268***	0.0270***	-0.0142***	0.0127***	0.0822***
Chimney sweeper	-0.0783***	-0.0781***	-0.0777***	-0.0392***	-0.0815***
Shoemaker	-0.0738***	-0.0742***	-0.0511***	-0.0381***	-0.0577***
Stone carver	0.125***	0.126***	0.111***	0.140***	0.170***
Roadmaking	-0.0141	-0.0128	0.0846***	-0.0527*	0.00116
Plasterer	0.0304***	0.0307***	0.0670***	0.0398***	0.0541***
Dry-cleaner	-0.0657***	-0.0654***	-0.0145***	-0.0506**	-0.0629***
Cabinetmaker	0.0849***	0.0856***	0.0284***	0.112***	0.137***
Ceramist	0.00706**	0.00794**	0.00461	0.0467***	0.0134***
Clocksmith	0.0152***	0.0149***	-0.0433***	0.0233***	0.0860***
Carpenter	0.0854***	0.0862***	0.0483***	0.100***	0.152***
Bicycle mechanic	0.0974***	0.0974***	0.0546***	0.141***	0.127***
Constant	0.165***	0.140***	-0.249***	0.146***	1.345***
Observations	296,228	296,228	68,131	84,254	116,183
R ²	0.07	0.07	0.10	0.06	0.11

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 9. Robustness test. Baseline model

	All	Rural	Semi-urban	Urban
Broadband internet (over 50 Mbit/s in 2017)	0.0007**	0.0042***	-0.0016***	-0.0046***
Population density	0.0001***	-0.0001***	0.00004***	0.0001***
Share of employees with acad. education	0.0070***	0.0066***	0.0133***	-0.0020
Share of employees without formal educ.	-0.0125***	-0.0248***	-0.0013	-0.0566***
Sales revenue in craft sector	0.0023***	0.0030***	-0.0011***	0.0025***
GDP per capita	-0.0028***	0.0016***	-0.0008**	-0.0021***
Birth rate	0.0032***	-0.0002	-0.0026***	0.0089***
Rate of reg. In-migration	0.0001	-0.0006***	0.0007***	0.0010***
Increase / Decrease of inhabitants aged 65+	-0.0156***	0.0120***	-0.0118***	-0.0485***
Employees in craft sector overall	-0.0022***	0.0004	0.0138***	-0.0106***
Firm size	-0.0001	-0.0003	0.0002	-0.0004
Constant	0.214***	-0.210***	0.250***	1.450***
Observations	296,228	73,948	93,376	128,901
R ²	0.04	0.07	0.03	0.08

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 10. Robustness tests. Baseline model without broadband internet variable

	All	Rural	Semi-urban	Urban
Broadband internet (over 50 Mbit/s in 2017)	-	-	-	-
Population density	0.0001***	-0.0001***	0.00002*	0.00004***
Share of employees with acad. education	0.0075***	0.0139***	0.0132***	-0.0043***
Share of employees without formal educ.	-0.0118***	-0.0215***	-0.0021	-0.0572***
Sales revenue in craft sector	0.0023***	0.0033***	-0.0010***	0.0023***
GDP per capita	-0.0028***	0.0023***	-0.0010**	-0.0021***
Birth rate	0.0034***	0.0005**	-0.0028***	0.0081***
Rate of reg. In-migration	0.0001	-0.0006***	0.0007***	0.0012***
Increase / Decrease of inhabitants aged 65+	-0.0156***	0.0112***	-0.0123***	-0.0458***
Employees in craft sector overall	-0.0028***	-0.0010	0.0148***	-0.0090***
Firm Size	-0.0001	-0.0001	0.0001	0.0054
Constant	0.252***	-0.097***	0.143***	1.109***
Observations	296,228	73,948	93,376	128,901
R ²	0.04	0.05	0.02	0.07
Occupations included	Yes	Yes	Yes	Yes

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 11. Robustness tests. Baseline model highly correlated variables dropped

	All	Rural	Semi-urban	Urban
Broadband internet (over 50 Mbit/s in 2017)	-	-	-	-
Population density	0.0001***	-0.0001***	0.00003***	0.0001***
Share of employees with acad. education	0.0066***	0.0246***	0.0114***	-0.0007
Share of employees without formal educ.	-	-	-	-
Sales revenue in craft sector	0.0017***	0.0032***	-0.0010***	0.0024***
GDP per capita	-0.0028***	0.0001	-0.0009**	-0.0027***
Birth rate	0.0018***	-0.0012***	-0.0035***	0.0085***
Rate of reg. in-migration	0.0001	-0.0009***	0.0007***	0.0007***
Increase / Decrease of inhabitants aged 65+	-	-	-	-
Employees in craft sector overall	-0.0033***	0.0007	0.0123***	-0.0115***
Firm Size	0.0017***	-0.0001	0.0022***	0.0012*
Constant	0.0464***	0.339***	0.123***	0.0552
Observations	296,228	73,948	93,376	128,901
R ²	0.07	0.08	0.05	0.08
Occupations included	Yes	Yes	Yes	Yes

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 12. Robustness tests. Baseline model with further variables dropped

	All	Rural	Semi-urban	Urban
Broadband internet (over 50 Mbit/s in 2017)	0.00231***	0.00385***	-0.00105***	-0.000436***
Population density	-	-	-	-
Share of employees with acad. education	-	-	-	-
Share of employees without formal educ.	-0.00664***	-0.0204***	-0.0149***	-0.0162***
Sales revenue in craft sector	-	-	-	-
GDP per capita	0.000047	0.000600***	0.00181***	-0.00206***
Birth rate	-	-	-	-
Rate of reg. out-migration	-	-	-	-
Rate of reg. in-migration	0.00444***	0.00222***	0.0116***	0.00163***
Increase / Decrease of inhabitants aged 65+	-	-	-	-
Employees in craft sector overall	-0.00449***	0.00306***	0.00437***	-0.0178***
Firm Size	-	-	-	-
Constant	0.287	0.031	0.133*	0.709***
Observations	297,057	74,213	93,528	129,313
R ²	0.05	0.08	0.05	0.05

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 13. Robustness tests. Baseline model with further variables dropped

	All	Rural	Semi-urban	Urban
Broadband internet (over 50 Mbit/s in 2017)	0.0006***	0.0040***	-0.0017***	-0.0039***
Population density	0.0001***	-0.0001***	0.0001***	0.0001***
Share of employees with acad. education	-	-	-	-
Share of employees without formal educ.	-	-	-	-
Sales revenue in craft sector	0.0018***	0.0014***	-0.0009***	0.0026***
GDP per capita	-0.0017***	-0.0008***	-0.0001	-0.0016***
Birth rate	-	-	-	-
Rate of reg. out-migration	-	-	-	-
Rate of reg. in-migration	-	-	-	-
Increase / Decrease of inhabitants aged 65+	-0.0064***	0.0152***	-0.0069***	-0.0201***
Employees in craft sector overall	-0.0035***	-0.0011***	0.0093***	-0.0090***
Firm Size	-	-	-	--
Constant	0.0912***	-0.262***	0.398***	0.513***
Observations	297,057	74,213	93,528	129,313
R ²	0.06	0.07	0.04	0.08

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 14. Robustness tests. Baseline model with further variables dropped

	All	Rural	Semi-urban	Urban
Broadband internet (over 50 Mbit/s in 2017)	0.0005***	0.0042***	-0.0018***	-0.0038***
Population density	0.0001***	-0.0001***	0.0001***	0.0001***
Share of employees with acad. education	-	-	-	-
Share of employees without formal educ.	-	-	-	-
Sales revenue in craft sector	0.0018***	0.0022**	-0.0009***	0.0023***
GDP per capita	-0.0016***	-0.0018***	0.0001	-0.0022***
Birth rate	-	-	-	-
Rate of reg. out-migration	-	-	-	-
Rate of reg. in-migration	-	-	-	-
Increase / Decrease of inhabitants aged 65+	-	-	-	-
Employees in craft sector overall	-0.0041***	-0.0012***	0.0083***	-0.0146***
Firm Size	-	-	-	-
Constant	0.0718***	-0.243***	0.377***	0.458***
Observations	297,057	74,213	93,528	129,313
R ²	0.06	0.07	0.04	0.07

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 15. Correlation matrix of main variables

	Website prevalence	Broadband internet	Population density	Share of employees with academic education	Share of employees without formal education	Sales revenue in craft sector	GDP per capita	Development of birthrate	Rate of regional out-migration	Rate of regional in-migration	Increase/Decr. of inhabitants aged 65+	Employees in craft sector overall	Firm Size
Website prevalence	1.000	-	-	-	-	-	-	-	-	-	-	-	-
Broadband internet	0.10	1.000	-	-	-	-	-	-	-	-	-	-	-
Population density	0.16	0.29	1.000	-	-	-	-	-	-	-	-	-	-
Share of employees with academic education	0.14	0.29	0.66	1.000	-	-	-	-	-	-	-	-	-
Share of employees without formal education	0.0004	0.21	0.26	-0.01	1.000	-	-	-	-	-	-	-	-
Sales revenue in craft sector	0.009	-0.06	-0.25	-0.13	0.21	1.000	-	-	-	-	-	-	-
GDP per capita	0.064	0.22	0.46	0.65	0.25	0.08	1.000	-	-	-	-	-	-
Birth rate	0.06	0.08	0.26	0.18	0.21	0.06	0.20	1.000	-	-	-	-	-
Rate of regional out-migration	0.05	0.15	0.23	0.43	0.19	0.14	0.38	0.04	1.000	-	-	-	-
Rate of regional in-migration	0.06	0.18	0.22	0.43	0.19	0.16	0.37	0.06	0.99	1.000	-	-	-
Increase / Decrease of inhabitants aged 65+	-0.07	-0.25	-0.35	-0.04	-0.30	0.18	-0.22	0.04	-0.12	-0.11	1.000	-	-
Employees in craft sector overall	-0.09	-0.37	-0.54	-0.61	-0.20	0.35	-0.52	-0.07	-0.29	-0.29	0.35	1.000	-
Firm Size	0.014	0.09	0.09	0.06	0.10	0.05	0.11	0.05	0.06	0.06	-0.07	-0.02	1.000

Table 16. Robustness tests modifiable areal unit problem (MAUP)

	All		Rural		Semi-urban		Urban	
	County-level	Regional Planning - Level	County-level	Regional Planning - Level	County-level	Regional Planning - Level	County-level	Regional Planning - Level
Broadb.inter. (over 50 MB in 2017)	0.0005***	0.0005***	0.0040***	0.0037***	-0.0017***	-0.0021***	-0.0046***	-0.0044***
Population density	0.0001***	0.0001***	-0.0001***	-0.0001***	0.0001***	0.0000	0.0001***	0.0001***
Share of employees with acad. education	0.0071***	0.0061***	0.0064***	0.0062***	0.0137***	0.0106***	-0.0022***	-0.0057***
Share of employees without formal educ.	-0.0114***	-0.0123***	-0.0231***	-0.0253***	0,0002	-0.0021***	-0.0560***	-0.0609***
Turnover in craft sector	0.0022***	0.0023***	0.0030***	0.0028***	-0.0011***	-0.0011***	0.0024***	0.0031***
GDP per capita	-0.0029***	-0.0035***	0.0013***	0.0010***	-0.0009***	-0.0008***	-0.0022***	-0.0028***
Birth rate	0.0031***	0.0031***	-0,0004	0.0006***	-0.0025***	-0.0014***	0.0085***	0.0067***
Rate of reg. in-migration	0.0001***	0.0001*	-0.0005***	0.0005***	0.0007***	0.0008***	0.0010***	0.0012***
Increase / Decrease of inhabitants aged 65+	-0.0162***	-0.0103***	0.0110***	0.0101***	-0.0129***	-0.0128***	-0.0488***	-0.0357***
Employees in craft sector overall	-0.0018***	-0.0025***	0,0005	0.0006***	0.0141***	0.0143***	-0.0104***	-0.0133***
Apparatus construction	0.0915***	0.0335**	0.1170*	0.0298	-0,0311	0.0930**	0.1250**	0.0093
Optician	0.2180***	0.0555***	0.2390***	0.0198	0,1310	0.1520***	0.2240***	0.0147
Concrete building	0.2290***	0.0553***	0.2540***	0.0230	0,1290	0.1420***	0.2380***	0.0135
Well construction	0.2180***	0.0658***	0.1760***	0.0169	0.2810**	0.2120***	0.2060***	0.0200
Bookbinder	0.0945***	0.0472***	0.1110*	0.0173	-0,0353	0.1380***	0.1270**	0.0122
Baker	-0,0358	0,0376***	0,0014	0.0049	-0,1080	0.1410***	-0,0439	-0.0018
Roofer	0.1880***	0.0489***	0.2100***	0.0285	0,0885	0.1330***	0.1920***	-0.0037
Electrician	0.0615*	0.0358**	0,0529	0.0046	-0,0223	0.1290***	0.0856*	-0.0021
Butcher	-0,0201	0,0413***	0,0125	0.0118	-0,0998	0.1370***	-0,0149	0.018
Floor tiler	0,0344	0,0445***	0,0543	0.0241	-0,0492	0.1410***	0,0389	-0.0058
Hairdresser	-0.0635**	-0.0675***	-0,0359	-0.0133	-0,1200	0.2150***	-0,0813	0.0174
Building cleaner	0.1450***	0.0589***	0.1900***	0.0307*	0,0720	0.1540***	0.1350***	0.0137
Scaffolder	0.0912***	0.0276*	0.1190**	0.0036	-0,0204	0.1100**	0.1210**	0.0028
Glazier	0.2470***	0.0484***	0.2450***	0.0208	0,1370	0.1340***	0.2790***	0.0126
Goldsmith	0.0620*	0.0481***	0,0814	0.0214	-0,0760	0.1250***	0.0939*	0.0139
Engraver	0.0718**	0.0468***	0,0907	0.0308	-0,0477	0.1420***	0.0987*	-0.0036
Heating engineer	0.0977***	0.0241*	0,0772	-0.0044	0,0028	0.1270***	0.1420***	-0.0128
Audiologist	0.2190***	0.0700***	0.2850***	0.0243	0,1430	0.1700***	0.1940***	0.0283
Installer	0.2790***	0.1740***	0.1870***	0.0473**	0.1820*	0.3160***	0.2640***	0.0559***
Automotive mechatronics engineer	0.0727**	0.0448***	0,0813	0.0081	0,0051	0.1540***	0,0775	0.0076
Plumber	0.0812**	0.0423***	0,0730	0.0201	-0,0406	0.1200**	0.1170**	0.0027
Confectionist	0,0534	0,0375**	0,0048	-0.0147	-0,1210	0.1100**	0.1560***	0.0334
Furrier	-	-	-	-	-0,1250	0.0984*	0,0498	-0.0349
Painter	0.1060***	0.0613***	0.0932*	0.0128	0,0478	0.1790***	0.1030**	0.0063
Mason	0.1630***	0.0279*	0.2390***	0.0166	0,0724	0.1140**	0.1520***	-0.0038
Custom tailor	0.1680***	0.0504***	0,1470	-0.0323	-	-	0.2050***	0.0328
Organ maker	0,0231	0,0286	0,0447	-0.0161	-0,0570	0.1220**	-0,0114	0.0079
Orthopedic technician	0.1520***	0.0462***	0.1710***	0.0165	0,0585	0.1530***	0.1710***	0.0050

Interior decorator	0.0770**	0.0400***	0.1250**	0.0316	-0,0461	0.1240***	0.0956*	-0.0015
Plumbing electrician	0.2880***	0.0695***	0.2340***	0.0285	0.2050*	0.1790***	0.2900***	0.0011
Heating engineering	0.0542*	0.0417***	0,0245	-0.0029	0,0139	0.1700***	0,0577	-0.0039
Plumbing and heating installer	0.1110***	0.0489***	0.0980*	-0.0203	-0,0078	0.1310***	0.1450***	-0.0025
Smith	0,0237	0,0489***	0,0341	0.025	-0,1150	0.1200***	0,0682	0.0195
Chimney sweeper	-0.0822**	-0.0269*	-0,0298	0.0063	-0,1690	0.1230***	-0.0955*	-0.0092
Shoemaker	-	-	-	-	-	-	-	-
Stone carver	0.1270***	0.0176***	0.1590***	0.0194	0,0173	0.1060**	0.1610***	-0.0200
Roadmaking	0,0351	0,0866***	0.1310**	0.0251	-0,1080	0.2060***	0,0375	0.0157
Plasterer	0,0346	0,0034	0.1140**	-0.0102	-0,0778	0.0897*	0,0472	-0.0395**
Dry-cleaner	-0,0388	0,0713***	0,0325	0.0400*	-0,1240	0.1650***	-0,0553	0.0209
Cabinetmaker	0.0903***	0.0408***	0,0760	0.0164	-0,0029	0.1390***	0.1300**	-0.0038
Ceramist	0,0059	0,0190	0,0524	-0.0025	-0,0792	0.1290***	-	-
Clocksmith	0,0150	0,0307**	0,0051	0.0291	-0,1020	0.1190**	0,0746	-0.0027
Carpenter	0.0915***	0.0356**	0.0960*	0.0186	-0,0128	0.1260***	0.1450***	0.0044
Bicycle mechanic	0.1030***	0.0488***	0.1030*	0.0167	0,0269	0.1560***	0.1210**	0.0092
Constant	0.142***	0.205***	-0.288***	0.1420***	0.256***	0.187***	0.256***	1.512***
Observations	297,057	297,057	74,213	74,213	93,528	93,528	129,313	129,313
R2	0.07	0.125	0.10	0.33	0.06	0.13	0.06	0.30

* p < 0.10, ** p < 0.05, *** p < 0.01

Table 17. Fit increase by variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
Broadband internet (over 50 Mbit/s in 2017)	-	Yes	-	-	-	-	-	-	-	-	-	-	Yes	Yes
Population density	-	-	Yes	-	-	-	-	-	-	-	-	-	Yes	Yes
Share of employees with acad. education	-	-	-	Yes	-	-	-	-	-	-	-	-	Yes	Yes
Share of employees without formal educ.	-	-	-	-	Yes	-	-	-	-	-	-	-	Yes	Yes
Sales revenue in craft sector	-	-	-	-	-	Yes	-	-	-	-	-	-	Yes	Yes
GDP per capita	-	-	-	-	-	-	Yes	-	-	-	-	-	Yes	Yes
Birth rate	-	-	-	-	-	-	-	Yes	-	-	-	-	Yes	Yes
Rate of regional in-migration	-	-	-	-	-	-	-	-	Yes	-	-	-	Yes	Yes
Increase / Decrease of inhabitants aged 65+	-	-	-	-	-	-	-	-	-	Yes	-	-	Yes	Yes
Employees in craft sector overall	-	-	-	-	-	-	-	-	-	-	Yes	-	Yes	Yes
Firm Size	-	-	-	-	-	-	-	-	-	-	-	Yes	Yes	Yes
Occupations included	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
R ²	0.0345	0.0459	0.0592	0.0527	0.0353	0.0353	0.0387	0.0387	0.0392	0.0408	0.0433	0.0361	0.0395	0.0733
Fit increase	-	0.0114	0.0247	0.0182	0.0008	0.0008	0.0042	0.0042	0.0047	0.0063	0.0088	0.0016	0.0050	0.0388

Figure 3: Average Firm Size by Region Type and Industry

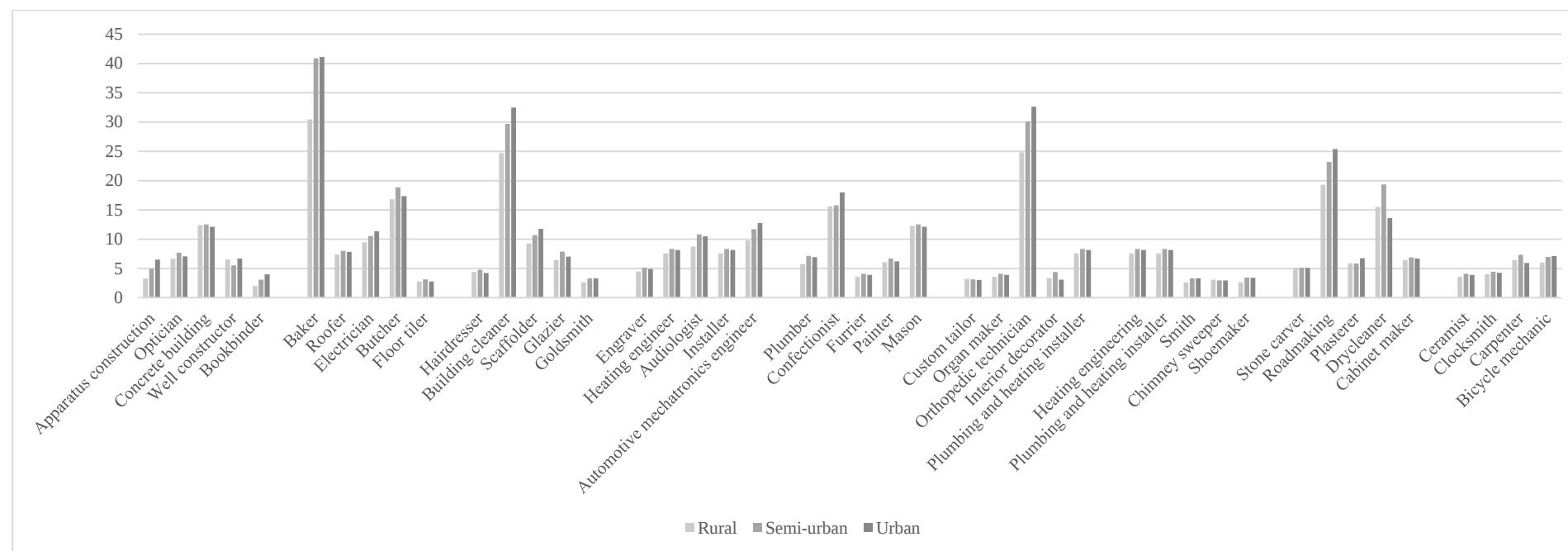


Table 18: Average Firm Size by Region Type

	Rural	Semi-urban	Urban
Mean	8.3	9.6	9.6
Median	6.4	7.2	7.0