

## Erratum

*Erratum to “On overall sampling plan for small area estimation”*

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[Statistical Journal of the IAOS 33(3), 2017, 727–740, DOI 10.3233/SJI-170370]

<http://content.iospress.com/articles/statistical-journal-of-the-iaos/sji170370>

In the original article, two columns in Table 3 contain incorrect values. Two columns in Tables 7 and 8 contain values which are in the wrong order. The corrections don't affect other tables, figures, empirical results and conclusions. We apologize for these inconveniences.

Table 3, page 734: Area sample sizes by allocation. The area-specific samples sizes for allocations Cal- $g_1$  and MC- $q025$  are incorrect. The corrected Table 3 is included below.

Table 3

Area sample sizes by allocation. The calibrated area sizes are used for calculating the sample sizes for CAL- $g_1$  allocation. The sampling population is denoted “Population”

Area (province)	Proxy data		Popu- lation $N_d$	Model-based		Model-free			
	True $N_d$	Calibrated $\tilde{N}_d$		CAL- $g_1^1$	MC- $q025^1$	Number-based		Parameter-based	
						EQU	PRO	NLP	NEY
Uusimaa	7,449	3,516.5	6,813	43	55	12	69	36	125
Pirkanmaa	2,121	1,256.8	2,003	12	14	12	20	11	13
Varsinais-Suomi	1,652	1,670.3	1,543	18	19	12	16	18	14
Päijät-Häme	1,103	1,368.2	1,166	14	14	12	12	13	8
Central Finland	1,219	973.8	1,141	9	8	12	12	9	6
North Ostrobothnia	1,300	1,191.4	1,131	11	11	12	12	9	7
Satakunta	962	1,189.3	1,017	11	11	12	10	15	6
Kymenlaakso	836	911.5	929	8	7	12	10	13	4
Pohjois-Savo	1,009	1,228.7	923	12	11	12	9	13	6
Kanta-Häme	755	1,021.8	885	9	9	12	9	10	5
Etelä-Savo	825	1,032.6	751	9	9	12	8	10	4
South Karelia	481	1,090.7	553	10	9	12	6	12	3
North Karelia	625	1,225.2	549	12	10	12	6	7	4
Lapland	649	1,099.2	544	10	9	12	6	12	3
Ostrobothnia	523	972.2	421	8	7	12	4	8	2
South Ostrobothnia	346	913.3	311	8	6	12	3	6	2
Kainuu	216	706.3	185	5	3	12	2	8	2
Central Ostrobothnia	159	862.3	160	7	4	12	2	6	2
Total	22,230	22,230	21,025	216	216	216	216	216	216

<sup>1)</sup> based on the adjusted homogeneity coefficient (value 0.1697) computed of the proxy variable  $y^*$ .

Table 7

Area and population level RRMSE%*s* by allocation and estimation method. The values are computed of the simulated samples drawn from the business register in October 2015

Area (province)	$N_d$	Model-based		Design-based H-T and model-assisted							
		CAL- <i>g</i> 1	MC- <i>q</i> 025	EQU/ H-T	EQU/ GREG	PRO/ H-T	PRO/ GREG	NLP/ H-T	NLP/ GREG	NEY/ H-T	NEY/ GREG
Uusimaa	6,813	12.15	9.95	25.37	20.91	10.10	7.66	14.89	11.28	7.85	5.50
Pirkanmaa	2,003	10.14	9.72	19.56	14.66	15.01	12.08	21.21	15.57	19.20	17.86
Varsinais-Suomi	1,543	12.01	11.77	25.77	18.11	23.08	17.52	21.46	15.79	23.91	21.31
Päijät-Häme	1,166	10.14	10.38	20.42	14.02	20.92	17.03	19.68	15.33	25.26	24.62
Central Finland	1,141	11.39	12.25	17.32	11.97	16.94	16.20	20.24	16.03	23.77	29.58
North Ostrobothnia	1,131	8.80	9.22	17.97	11.51	17.35	14.55	19.86	13.73	23.25	23.15
Satakunta	1,017	16.72	17.87	22.29	18.81	24.27	24.69	19.91	18.15	31.00	35.68
Kymenlaakso	929	20.62	23.74	19.07	14.72	21.33	26.25	18.88	18.48	32.43	55.80
Pohjois-Savo	923	14.45	16.24	22.50	16.93	26.50	25.27	22.70	17.69	33.76	38.47
Kanta-Häme	885	12.90	13.76	17.17	13.25	20.42	22.61	19.14	16.90	27.32	38.37
Etelä-Savo	751	13.50	14.08	18.92	15.26	23.93	23.90	21.18	18.74	34.25	40.48
South Karelia	553	12.55	13.15	18.23	13.24	25.50	24.46	18.05	15.46	36.32	44.27
North Karelia	549	9.63	11.13	17.01	10.90	24.20	19.71	21.64	15.96	29.58	28.34
Lapland	544	16.23	19.74	22.64	15.67	30.86	32.44	22.54	18.28	45.09	55.22
Ostrobothnia	421	11.66	12.45	15.75	14.13	28.14	33.23	19.26	19.34	37.96	57.19
South Ostrobothnia	311	13.19	14.94	13.59	11.67	30.50	40.15	20.25	21.41	36.56	61.48
Kainuu	185	26.77	32.16	17.12	15.24	43.64	61.49	21.63	26.13	43.71	80.85
Central Ostrobothnia	160	19.45	25.89	13.31	13.82	35.19	58.30	19.81	26.54	33.80	72.95
Mean over areas (%)		14.02	15.47	19.11	14.71	24.33	26.53	20.13	17.82	30.28	40.68
Population value (%)		6.06	5.13	13.26	10.97	5.94	4.82	8.23	6.35	5.42	4.98

Table 7, page 740: Area and population level RRMSE%*s* by allocation and estimation method. The area-specific values in two rightmost columns (NEY/H-T and NEY/GREG) are correct, but they have the wrong order from top to bottom. The values must be re-ordered. The corrected Table 7 is included below.

Table 8, page 740: Area and population level ARB%*s* by allocation and estimation method. The area-specific values in two rightmost columns (NEY/H-T and NEY/GREG) are correct, but they have the wrong order from top to bottom. The values must be re-ordered. The corrected Table 8 is included below.

Table 8

Area and population level ARB%*s* by allocation and estimation method. The values are computed of the simulated samples drawn from the business register in October 2015

Area (province)	$N_d$	Model-based		Design-based H-T and model-assisted							
		CAL- <i>g</i> 1	MC- <i>q</i> 025	EQU/ H-T	EQU/ GREG	PRO/ H-T	PRO/ GREG	NLP/ H-T	NLP/ GREG	NEY/ H-T	NEY/ GREG
Uusimaa	6,813	7.63	5.94	0.53	1.61	0.94	1.71	0.40	1.64	0.55	0.98
Pirkanmaa	2,003	1.28	1.14	0.34	0.35	0.44	0.09	0.07	0.04	0.42	0.22
Varsinais-Suomi	1,543	0.83	0.46	0.32	1.12	0.60	0.01	0.15	0.10	0.07	0.18
Päijät-Häme	1,166	0.85	1.03	0.48	0.63	0.10	0.11	0.24	0.39	0.07	0.32
Central Finland	1,141	5.09	5.84	0.25	0.14	0.33	0.23	0.33	0.37	0.30	0.16
North Ostrobothnia	1,131	1.53	1.38	0.09	0.08	0.42	0.10	0.16	0.39	0.78	0.46
Satakunta	1,017	7.77	9.41	0.32	0.97	0.12	0.21	0.52	1.03	0.36	0.06
Kymenlaakso	929	14.84	17.66	0.60	0.75	0.06	0.49	0.40	0.06	0.68	1.37
Pohjois-Savo	923	5.40	6.54	0.39	0.59	1.68	0.02	0.45	0.73	1.04	0.52
Kanta-Häme	885	5.63	6.67	0.23	0.03	0.39	0.59	0.31	0.66	0.28	0.11
Etelä-Savo	751	5.14	5.66	0.44	0.30	0.64	1.01	0.09	0.42	0.38	3.47
South Karelia	553	5.94	6.10	0.18	0.07	1.47	0.64	0.09	0.09	1.45	1.44
North Karelia	549	4.32	6.45	0.27	0.12	0.05	0.02	0.23	0.54	0.39	0.15
Lapland	544	10.36	13.17	0.40	0.62	1.66	0.69	0.23	1.00	0.97	0.99
Ostrobothnia	421	2.15	1.68	0.12	0.24	0.17	0.00	0.69	0.01	0.82	1.41
South Ostrobothnia	311	6.58	7.84	0.39	0.43	1.21	0.35	0.01	0.59	2.53	3.49
Kainuu	185	21.64	27.14	0.76	0.18	0.21	0.55	0.92	0.22	1.48	0.90
Central Ostrobothnia	160	10.59	16.93	0.49	0.04	0.01	0.94	0.20	2.97	1.68	6.63
Mean over areas (%)		6.53	7.84	0.37	0.46	0.58	0.43	0.31	0.62	0.79	1.27
Population value (%)		2.48	1.23	0.29	0.99	0.58	0.58	0.17	0.80	0.19	0.30