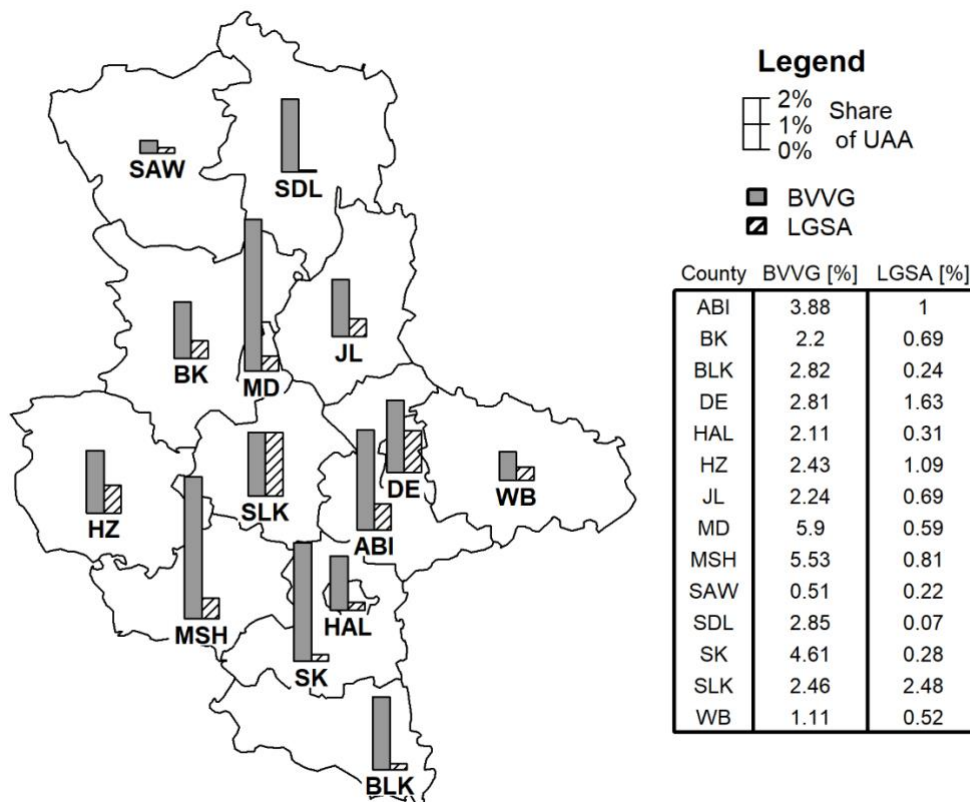


## Appendix A: Descriptive statistics

**Table A1:** Land transaction Saxony-Anhalt and market share of LGSA and BVVG auctions, 2007–2018

Year	Number of Transaction*	Average soil quality* (index)	Sold agricultural land* (ha)	Share LGSA** (%)	Share BVVG** (%)
2007	2,436	59	9,153	5.09	10.98
2008	3,380	61	13,706	5.07	4.54
2009	3,371	60	13,487	6.89	9.72
2010	2,958	59	11,440	3.65	7.60
2011	3,125	61	11,279	3.99	10.40
2012	3,167	60	13,049	7.03	7.21
2013	2,954	63	10,024	0.89	16.78
2014	3,488	59	12,289	8.14	10.88
2015	3,537	61	13,110	5.34	10.20
2016	3,252	58	11,043	6.11	5.31
2017	3,418	58	11,426	6.57	11.09
2018	3,190	58	11,789	2.12	7.11

Source: \* Total sales published by StaLa (2021). \*\*Share of public sellers at sold agricultural land obtained from data provided by LGSA and BVVG.



**Figure A1:** Turnover of the utilized agricultural area by LGSA and BVVG in the respective county  
 Source: Utilized agricultural area in counties of Saxony-Anhalt by StaLa (2021), Transaction volume obtained from all observations (2003-2018) provided by LGSA and BVVG.

**Table A2:** Right holder purchases by number of participants

	<i>Number of participants</i>					
	#2	#3	#4	#5	#6-8	#9+
Observations	114	201	199	152	184	76
...of which right hold has won	94 (82.5%)	149 (74.1%)	149 (74.9%)	104 (68.4%)	111 (60.3%)	45 (59.2%)
...by exercising RFR	57 (60.6%)	108 (72.5%)	132 (88.6%)	99 (95.2%)	107 (96.4%)	45 (100%)
...or won by own bid	37 (39.4%)	41 (27.5%)	17 (11.4%)	5 (4.8%)	4 (3.6%)	0 (0%)

**Table A3:** Descriptive of LGSA grouped by right holder behavior

	Mean	Med.	SD	Q01	Q99
<i>LGSA: exercised RFR (548)</i>					
Lot size (ha)	7.52	8.67	3.31	0.12	14.7
Soil quality (index)	67.68	71.00	21.19	26.30	100.00
Share of arable land (%)	88.06	98.7	23.24	0.00	100.00
Share of grassland (%)	9.08	0.00	21.66	0.00	100.00
Share of other land (%)	2.87	0.00	6.37	0.00	33.26
Number of bids (count)	4.59	4.00	2.27	1.00	12.00
Winning bid (€/m <sup>2</sup> )	1.83	1.66	1.13	0.26	4.54
<i>LGSA: won by own bid (104)</i>					
Lot size (ha)	7.42	8.42	3.04	0.44	12.72
Soil quality (index)	53.78	50.5	18.39	20.59	92.37
Share of arable land (%)	76.56	91.05	31.3	0.00	100.00
Share of grassland (%)	18.79	1.45	31.15	0.00	100.00
Share of other land (%)	4.63	1.00	8.38	0.00	36.66
Number of bids (count)	3.03	3.00	1.07	2.00	6.00
Winning bid (€/m <sup>2</sup> )	1.03	0.77	0.70	0.25	2.75
<i>LGSA: rejected RFR (274)</i>					
Lot size (ha)	7.08	7.95	3.07	0.39	11.71
Soil quality (index)	71.44	79.00	21.13	21.47	99.00
Share of arable land (%)	88.48	98.7	23.47	0.00	100.00
Share of grassland (%)	8.57	0.00	21.91	0.00	100.00
Share of other land (%)	2.95	0.00	6.66	0.00	34.05
Number of bids (count)	4.93	4.00	2.69	1.00	13.00
Winning bid (€/m <sup>2</sup> )	2.29	2.25	1.28	0.31	5.26

*Note:* Due to data privacy regulations, the table does not include information about the minima or maxima.

**Table A4:** Weighted difference in means of outcome measures

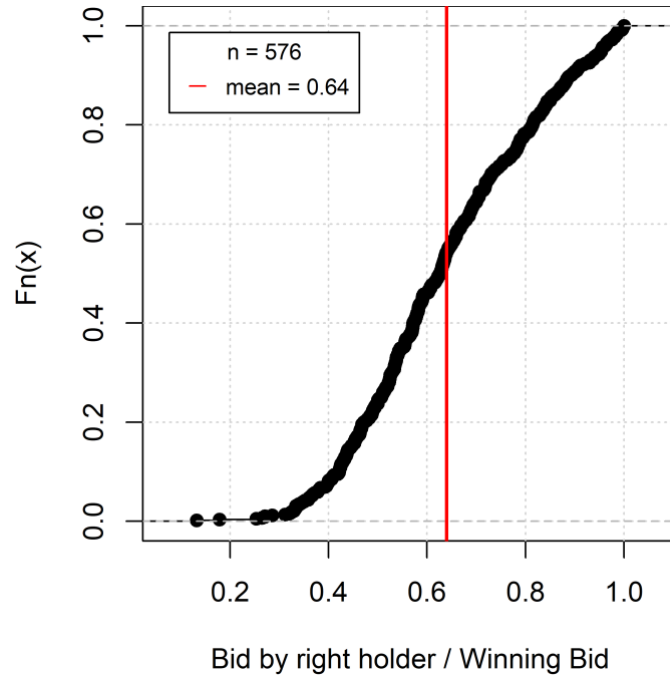
	<i>Outcome measures</i>			
	Bids ( <i>n</i> )	Bids by non-right holders ( $n^{NRH}$ )	Price ( <i>p</i> )	Price ( $\log(p)$ )
BVVG	5.151	5.151	2.130	0.549
LGSA	4.515	3.781	1.878	0.377
Difference	-0.636*** (0.169)	-1.370*** (0.169)	-0.252*** (0.070)	-0.172*** (0.040)
Treated	926	926	926	926
Control	590	590	590	590

Note: BVVG is weighted according to matching frequency. Heteroscedasticity-consistent standard errors in parentheses. Asterisks indicate \* $p < 0.1$ ; \*\* $p < 0.05$ ; \*\*\* $p < 0.01$  based on weighted t-test.

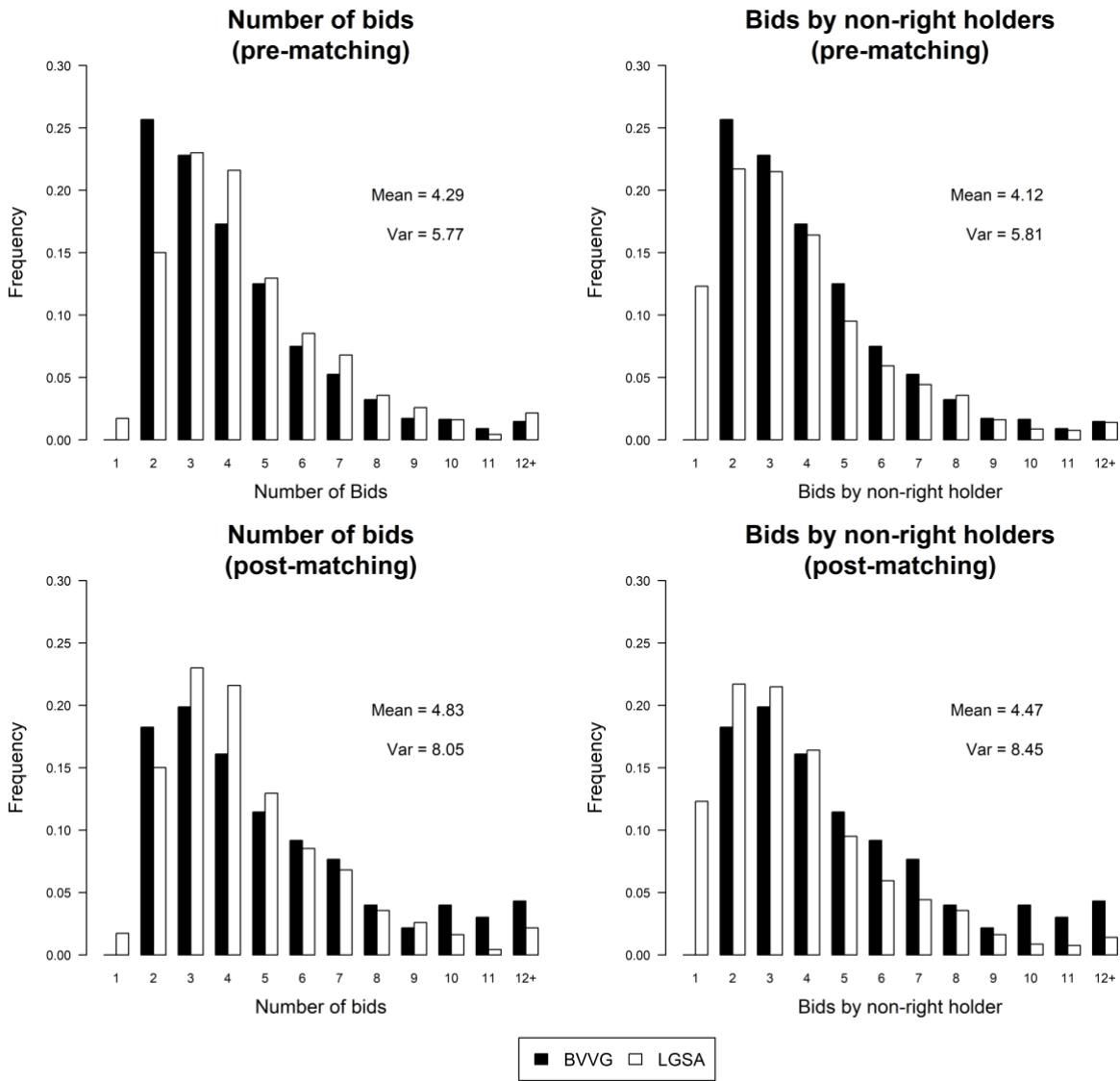
**Table A5:** Descriptive statistics of LGSA and matched BVVG sample

	<i>Seller: LGSA (926 transaction)</i>					<i>Seller: BVVG* (590 transaction)</i>				
	Mean	Med.	SD	Q01	Q99	Mean	Med.	SD	Q01	Q99
<i>Lot characteristics</i>										
Lot size (ha)	7.38	8.34	3.21	0.19	13.33	6.86	6.94	3.57	0.27	14.46
Soil quality (index)	67.23	71.00	21.46	22.93	99.00	66.68	71.00	21.64	23.67	99.00
Share of arable land (%)	86.89	98.2	24.59	0.00	100.00	87.25	99.1	25.65	0.00	100.00
Share of grassland (%)	10.02	0.00	23.17	0.00	100.00	9.73	0.00	24.27	0.00	100.00
Share of other land (%)	3.09	0.00	6.73	0.00	34.45	3.02	0.00	6.66	0.00	37.88
<i>Auction characteristics</i>										
Number of bids	4.52	4.00	2.36	1.00	12.75	5.15	4.00	3.21	2.00	17.75
Bids by non-right holders	3.78	3.00	2.38	1.00	12.00	5.15	4.00	3.21	2.00	17.75
Winning bid (€/m <sup>2</sup> )	1.88	1.73	1.19	0.27	4.70	2.13	1.89	1.24	0.3	5.12

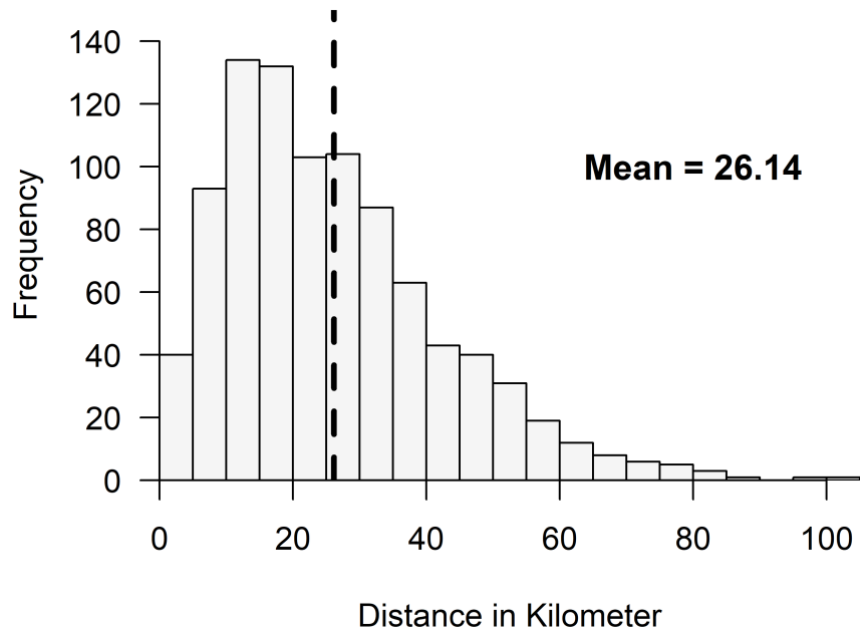
Note: Due to data privacy regulations, the table does not include information about the minima or maxima. \*For BVVG, values are calculated by using weights.



**Figure A2:** Ratio between bid by right holder and winning bid



**Figure A3:** Frequency of competition measures by LGSA and BVVG



**Figure A4:** Distance between matched auction pairs