- Table 1:
- Table 2:
- Table 3:
- Figure 1:
- Dataset details

Table 1:

Final maximin regret/dataset	CUCB	IMFB	<i>∢</i> -gred	IMLinUCB	IMLinUCB- FW	CUCB- FW	<i>∈</i> - gred- FW	IMFB- FW
pokec	9.10± 0.49	2.95± 0.30	10.42 ± 0.21	5.08± 0.16	0.12± 0.008	0.39± 0.13	0.61± 0.21	0.08± 0.34
bail	21.085 ± 0.66	4.05± 0.18	27.25 ± 0.58	1.87± 0.03	0.50± 0.06	0.11± 002	0.33± 0.11	0.07± 0.02
german	1.44± 0.51	2.61± 0.37	4.05± 0.51	44.27± 2.09	32.33± 0.13	1.17± 0.19	2.61± 0.02	1.33± 0.08

Table 2:

Final welfare regret(alpha=2)/dataset	CUCB	IMFB	<i>∈</i> -gred	IMLinUCB	IMLinUCB- FW	CUCB- FW	<i>∈</i> -gred- FW	IMFB- FW
pokec	12530.01 ± 231.77	4886± 294.00	14720.88 ± 233.51	7241.75± 254.33	133.6± 19.88	136.83 ± 50.85	244.02 ± 37.11	49.82 ± 10.09
bail	196292.60 ± 4105.88	44893.83 ± 3766.20	240386.97 ± 10339.79	21944.96 ± 100.89	552.86± 21.00	1747.43 ± 206.54	3556.61 ± 63.93	742.39 ± 40.88
german	607.64± 164.09	931.73± 199.76	1117.88± 279.98	14011.87± 2041.44	10548.99± 1035.47	662.76 ± 177.29	1073.29 ± 441.20	744.18 ± 197.11

Table 3:

	CUCB	IMFB	ϵ -gred	IMLinUCB	IMLinUCB- MIP	CUCB- MIP	ϵ -gred-MIP
Maximin	9.11	7.70	8.92	7.69	0.66	1.31	0.92
Diversity	337787	290017	405019	379640	86410	25055	90311
Welfare (alpha=2)	2980099.17	3249013.44	3802188.09	4559944.78	670012.36	794457.1	13026645.58
Welfare (alpha=0.5)	1445772.92	1699921.00	2339158.61	3105772.80	540007.77	312235.29	781120.92
Welfare (alpha=-2)	69034889.79	8980091.90	92158872.73	18708994.68	1089348.65	458012.45	909953.30

Figure 1:

Dataset details

For the dataset processing of Youtube dataset, we constructed the node features with the outer product of the node ID and community ID (which group the node belongs and the community is the sensitive attribute). We also use jaccard similarity between node feature as the ground truth diffusion probability and remain the rest superparameter unchanged.