

Log file of replicating the results in the appendix

Executing the Benchmark case CES = 1.5

wage price_d price_c

0.4847 0.5618 0.6602

ld ls outlhs outrhs out

0.9823 0.9817 0.2960 0.2953 0.0000

gamma = 0.93

Whole Distribution

Firm Size: Model vs Data

0.5081 0.2293 0.1099 0.1264 0.0263

0.4698 0.2797 0.1290 0.1020 0.0195

Employment Size: Model vs Data

0.1066 0.1343 0.1446 0.4090 0.2055

0.0864 0.1611 0.1655 0.3501 0.2369

Polluting Sector

Firm Size and Employment Share

0.4372 0.2596 0.1234 0.1525 0.0273

0.0856 0.1270 0.1354 0.4456 0.2064

Non-polluting Sector

Firm Size and Employment Share

0.5250 0.2221 0.1067 0.1202 0.0261

0.1129 0.1365 0.1473 0.3981 0.2052

Average Tax =

0.1300

Yd, Yc, Y, Yd_share

0.5661 1.9123 1.3784 0.2012

Clean Share

0.5618

Executing the no-dirty tax case CES = 1.5

wage price_d price_c

0.5430 0.4774 0.6756

ld ls outlhs outrhs out

0.9838 0.9843 0.4066 0.4071 0.0000

gamma = 0.93

Whole Distribution

Firm Size: Model vs Data

0.5030	0.2227	0.1100	0.1498	0.0146
0.4698	0.2797	0.1290	0.1020	0.0195

Employment Size: Model vs Data

0.0893	0.1121	0.1244	0.4879	0.1863
0.0864	0.1611	0.1655	0.3501	0.2369

Polluting Sector

Firm Size and Employment Share

0.3001	0.2215	0.1306	0.2077	0.1401
0.0218	0.0403	0.0529	0.2490	0.6360

Non-polluting Sector

Firm Size and Employment Share

0.5265	0.2228	0.1076	0.1431	0
0.1173	0.1419	0.1540	0.5868	0

Average Tax =

0.1186

Yd, Yc, Y, Yd_share

0.7622	1.8746	1.4581	0.2232
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Clean Share

0.7310

Executing the no tax case CES = 1.5

wage price_d price_c

0.7756	0.5616	0.6602
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ld ls outlhs outrhs out

0.9924	0.9923	0.2954	0.2955	0.0000
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gamma = 0.93

Whole Distribution

Firm Size: Model vs Data

0.3593	0.2095	0.1259	0.2427	0.0626
0.4698	0.2797	0.1290	0.1020	0.0195

Employment Size: Model vs Data

0.0322	0.0520	0.0697	0.4203	0.4259
0.0864	0.1611	0.1655	0.3501	0.2369

Polluting Sector

Firm Size and Employment Share

0.3044	0.2241	0.1339	0.2735	0.0641
0.0256	0.0472	0.0628	0.4381	0.4264

Non-polluting Sector

Firm Size and Employment Share

0.3726	0.2059	0.1240	0.2352	0.0623
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0.0341	0.0534	0.0717	0.4149	0.4258
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Average Tax =

0

Yd, Yc, Y, Yd_share

0.7340	2.4848	1.7901	0.2008
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Clean Share

0.8380

Executing benchmark case CES = 3.0

wage price_d price_c

0.4212	0.5285	0.7260
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ld ls outlhs outrhs out

0.9824	0.9818	0.3518	0.3520	0.0000
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gamma = 0.93

Whole Distribution

Firm Size: Model vs Data

0.5066	0.2302	0.1104	0.1476	0.0053
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0.4698	0.2797	0.1290	0.1020	0.0195
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Employment Size: Model vs Data

0.1059	0.1341	0.1445	0.5613	0.0543
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0.0864	0.1611	0.1655	0.3501	0.2369
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Polluting Sector

Firm Size and Employment Share

0.4341	0.2589	0.1225	0.1593	0.0252
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0.0799	0.1191	0.1264	0.4702	0.2045
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Non-polluting Sector

Firm Size and Employment Share

0.5258	0.2225	0.1071	0.1445	0
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0.1153	0.1395	0.1510	0.5943	0
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Average Tax =

0.1303

Yd, Yc, Y, Yd_share

0.6010	1.7082	1.1979	0.2039
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Clean Share

0.5648

Executing no dirty tax case CES = 3.0

wage price_d price_c

0.4866 0.4618 0.7294

ld ls outlhs outrhs out

0.9854 0.9853 0.6313 0.6303 0.0000

gamma = 0.93

Whole Distribution

Firm Size: Model vs Data

0.5008 0.2233 0.1120 0.1435 0.0204

0.4698 0.2797 0.1290 0.1020 0.0195

Employment Size: Model vs Data

0.0831 0.1049 0.1183 0.4077 0.2860

0.0864 0.1611 0.1655 0.3501 0.2369

Polluting Sector

Firm Size and Employment Share

0.2963 0.2177 0.1276 0.1956 0.1627

0.0177 0.0325 0.0424 0.1914 0.7159

Non-polluting Sector

Firm Size and Employment Share

0.5300 0.2241 0.1098 0.1360 0

0.1266 0.1530 0.1688 0.5516 0

Average Tax =

0.1210

Yd, Yc, Y, Yd_share

0.9646 1.5279 1.2809 0.2856

Clean Share

0.7437

Executing no tax case CES = 3.0

wage price_d price_c

0.6740 0.5286 0.7260

ld ls outlhs outrhs out

0.9925 0.9923 0.3517 0.3517 0.0000

gamma = 0.93

Whole Distribution

Firm Size: Model vs Data

0.3592	0.2100	0.1259	0.2275	0.0775
0.4698	0.2797	0.1290	0.1020	0.0195

Employment Size: Model vs Data

0.0320	0.0520	0.0695	0.3722	0.4743
0.0864	0.1611	0.1655	0.3501	0.2369

Polluting Sector

Firm Size and Employment Share

0.3018	0.2226	0.1316	0.2119	0.1321
0.0232	0.0429	0.0565	0.2698	0.6077

Non-polluting Sector

Firm Size and Employment Share

0.3741	0.2067	0.1244	0.2315	0.0633
0.0352	0.0553	0.0742	0.4092	0.4261

Average Tax =

0

Yd, Yc, Y, Yd_share

0.7802	2.2187	1.5557	0.2038
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Clean Share

0.8404

Print results by compute_tables_ces.m

Print Results for the CES Benchmark

Table 4: Aggregate Impacts		
	Polluting	Non-polluting
Output	2.830687	2.390392
Price	0.561786	0.660155
Output Value	1.590240	1.578030
Number of Firms	0.017611	0.018464
Mean Size	64.309729	51.162608
Aggregate Pollution	0.006816	
Aggregate Intensity	0.002408	
Clean Share	0.561755	

Print Results for the CES No Dirty Tax

Table 4: Aggregate Impacts

	Polluting	Non-polluting
Output	3.810842	2.343220
Price	0.477449	0.675579
Output Value	1.819484	1.583031
Number of Firms	0.008179	0.017611
Mean Size	176.170997	49.376319
Aggregate Pollution	0.005456	
Aggregate Intensity	0.001432	
Clean Share	0.731029	

Print Results for the CES No Tax

Table 4: Aggregate Impacts

	Polluting	Non-polluting
Output	3.669773	3.105987
Price	0.561600	0.660185
Output Value	2.060944	2.050526
Number of Firms	0.007507	0.007732
Mean Size	152.214516	123.500126
Aggregate Pollution	0.005109	
Aggregate Intensity	0.001392	
Clean Share	0.838035	

Print Results for the CES 3 Benchmark

Table 4: Aggregate Impacts

	Polluting	Non-polluting
Output	3.004783	2.135221
Price	0.528500	0.726014
Output Value	1.588028	1.550201
Number of Firms	0.019065	0.017986
Mean Size	68.358894	50.157141
Aggregate Pollution	0.007159	
Aggregate Intensity	0.002383	

Clean Share 0.564790

Print Results for the CES 3 No Dirty Tax

Table 4: Aggregate Impacts

	Polluting	Non-polluting
Output	4.823052	1.909920
Price	0.461800	0.729353
Output Value	2.227286	1.393005
Number of Firms	0.009187	0.016050
Mean Size	214.241229	46.086602
Aggregate Pollution	0.006415	
Aggregate Intensity	0.001330	
Clean Share	0.743746	

Print Results for the CES 3 No Tax

Table 4: Aggregate Impacts

	Polluting	Non-polluting
Output	3.901020	2.773345
Price	0.528605	0.726010
Output Value	2.062098	2.013477
Number of Firms	0.007912	0.007608
Mean Size	166.291889	119.844461
Aggregate Pollution	0.005347	
Aggregate Intensity	0.001371	
Clean Share	0.840447	

Compute again Table J.1 Upper Panel

Table 5: Aggregate Impacts CES = 1.5

	Polluting			Non-polluting		
Statistics	Benchmark	(i)	(ii)	Benchmark	(i)	(ii)
Output	100	129.64	134.63	100	129.90	98.03
Price	100	99.97	85.00	100	100.00	102.34

