

**Appendix to “The U.S. Market for Higher Education: A General  
Equilibrium Analysis of State and Private Colleges and Public  
Funding Policies”**

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This appendix provides additional material that are not included in “The U.S. Market for Higher Education: A General Equilibrium Analysis of State and Private Colleges and Public Funding Policies.” The proof of Corollary 1 and the algorithm used to compute the equilibria are given below. The tables that follow provide additional computational results not reported in the paper. Table A1 shows, by college and by income and ability deciles, the attendance proportions in the baseline equilibrium. (Colleges 1 and 2 are the two state colleges.) Tables A2-A7 provide the same information as in Table A1 for the policy experiments and also absolute changes in the attendance proportions from the policy experiments relative to the baseline equilibrium. Tables A8-A14 provide the attendance proportions and changes in them for the policy experiments aggregated to both state colleges, all private colleges, and all colleges (state and private). Table A15 shows, by college and averages by income and ability deciles, of student cost (not including the non-tuition cost), tuition, and federal aid in the baseline equilibrium. Tables A16-A21 provide the same information as in Table A15 for the policy experiments we examine. Tables A22-A27 provide the changes in student cost, tuition, and federal aid relative to the baseline equilibrium.

## Proof of Corollary 1

Since there is just one college, we drop the  $j$  subscript on its values. In this case, the choice probability (i.e., (23)) of  $(s, b, y)$  is given by:

$$r_s(b, y) = \frac{([y - p_s(b, y)]q)^\alpha}{(yq_o)^\alpha + ([y - p_s(b, y)]q)^\alpha}. \quad (\text{A1})$$

From (A1),

$$\begin{aligned} \frac{dr_s}{db} &= \frac{\partial r_s}{\partial p_s} \frac{\partial p_s}{\partial b} \quad \text{and} \quad \frac{dr_s}{dy} = \frac{\partial r_s}{\partial p_s} \frac{\partial p_s}{\partial y} \\ \text{where } \frac{\partial r_s}{\partial p_s} &< 0 \text{ by (24).} \end{aligned} \quad (\text{A2})$$

Differentiate (25) with respect to  $b$  and then  $y$ :

$$\frac{\partial p_s}{\partial b} = \frac{(1 - r_s)\alpha}{(1 + (1 - r_s)\alpha)} \cdot EMC'(b) + \frac{\alpha}{(1 + (1 - r_s)\alpha)^2} \cdot (y - EMC(b)) \frac{dr_s}{db} \quad (\text{A3})$$

$$\frac{\partial p_s}{\partial y} = \frac{1}{(1 + (1 - r_s)\alpha)} + \frac{\alpha}{(1 + (1 - r_s)\alpha)^2} \cdot (y - EMC(b)) \frac{dr_s}{dy}. \quad (\text{A4})$$

To prove  $\frac{\partial p_s}{\partial b} < 0$ , assume  $\frac{\partial p_s}{\partial b} \geq 0$ . From (A3), using that  $y - EMC(b) > 0$  for any attending students<sup>1</sup> and  $EMC'(b) < 0$ , it must then be that  $\frac{dr_s}{db} > 0$ . Using (A2), however,  $\frac{\partial p_s}{\partial b} \geq 0$  implies  $\frac{dr_s}{db} \leq 0$ , a contradiction.

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<sup>1</sup>Since tuition exceeds  $EMC$ , income must exceed  $EMC$  for a student to attend.

To prove  $\frac{\partial p_s}{\partial y} > 0$ , assume  $\frac{\partial p_s}{\partial y} \leq 0$ . From (A4), this implies  $\frac{dr_s}{dy} < 0$ . Using (A2), however,  $\frac{\partial p_s}{\partial y} \leq 0$  implies  $\frac{dr_s}{dy} \geq 0$ , a contradiction.

## Computation of Equilibrium

Equilibria can be computed using the following algorithm:

1. Pick starting values for:  $k_i, \theta_i, I_i$  for every university,  $\lambda_s$  for state universities, tax rates  $t_s$  for each state, a federal tax rate  $t_f$ .
2. Calculate the effective marginal costs at every school.
3. Calculate the tuition and utility levels at state universities. Given the net cost to the student, we need to check if: (i) the student can afford the net cost; (ii) the student's ability is above the admission threshold that applies (in-state vs. out-of-state).
4. Calculate the tuition and utility levels at private universities:
  - (a) Calculate the potential tuition  $p_1$ : Pick arbitrary starting choice probabilities for private universities. Calculate implied tuition. Calculate implied choice probabilities (use state university utilities calculated in step 3). Check the difference to starting choice probabilities. Iterate tuition vectors and choice probabilities until they imply each other.
  - (b) Calculate the potential tuition  $p_2$ : Repeat the previous step, this time adding the maximum aid amount  $\bar{A}$  to household income, conditional on private university attendance.
  - (c) Calculate the potential tuition  $p_3 = EFC + \bar{A}$ .
  - (d) Determine the effective tuition using Proposition 4 and the price cap. The students whose  $EMC$  exceed the price cap are not admitted.
  - (e) Calculate implied utility levels.
5. Calculate choice probabilities, the costs of state subsidies, and the cost of federal aid.
6. Update  $k_i, \theta_i, I_i$  for every university,  $\lambda_s$  for state universities, tax rates  $t_s$  for each state, and a federal tax rate  $t_f$ .
7. Check the difference to starting values. Iterate until convergence.

**Table A1: College Attendance Proportions, Baseline Equilibrium**

Income Decile	Ability Decile									
	1	2	3	4	5	6	7	8	9	10
	College 1									
1	0	0	0	0	0.0159	0.0208	0.0228	0.0304	0.0231	0.0186
2	0	0	0	0	0.1734	0.2615	0.2651	0.2614	0.2713	0.2442
3	0	0	0	0	0.2108	0.3084	0.3106	0.3131	0.3106	0.237
4	0	0	0	0	0.1789	0.2699	0.2722	0.2706	0.2696	0.1621
5	0	0	0	0	0.1654	0.2476	0.249	0.2493	0.2385	0.0887
6	0	0	0	0	0.2053	0.2961	0.299	0.2972	0.2548	0.0825
7	0	0	0	0	0.2327	0.3422	0.343	0.3268	0.222	0.057
8	0	0	0	0	0.3054	0.3831	0.3853	0.3231	0.1727	0.0602
9	0	0	0	0	0.3026	0.4209	0.4216	0.3279	0.1767	0.0651
10	0	0	0	0	0.2979	0.4513	0.4535	0.2736	0.096	0.0378
College 2										
1	0	0	0	0	0.0159	0.0208	0.0228	0.0304	0.0231	0.0186
2	0	0	0	0	0.1734	0.2615	0.2651	0.2614	0.2713	0.2442
3	0	0	0	0	0.2108	0.3084	0.3106	0.3131	0.3106	0.237
4	0	0	0	0	0.1789	0.2699	0.2722	0.2706	0.2696	0.1621
5	0	0	0	0	0.1654	0.2476	0.249	0.2493	0.2385	0.0887
6	0	0	0	0	0.2053	0.2961	0.299	0.2972	0.2548	0.0825
7	0	0	0	0	0.2327	0.3422	0.343	0.3268	0.222	0.057
8	0	0	0	0	0.3054	0.3831	0.3853	0.3231	0.1727	0.0602
9	0	0	0	0	0.3026	0.4209	0.4216	0.3279	0.1767	0.0651
10	0	0	0	0	0.2979	0.4513	0.4535	0.2736	0.096	0.0378
College 3										
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0.0405
3	0	0	0	0	0	0	0	0	0	0.0803
4	0	0	0	0	0	0	0	0	0.0019	0.1246
5	0	0	0	0	0	0	0	0.0001	0.0227	0.191
6	0	0	0	0	0	0	0	0.0061	0.0657	0.2024
7	0	0	0	0	0	0	0	0.0196	0.1319	0.1898
8	0	0	0	0	0	0	0	0.0516	0.1667	0.151
9	0	0	0	0	0	0	0	0.0564	0.1314	0.1658
10	0	0	0	0	0	0	0	0.0922	0.1953	0.1609
College 4										
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0.0303
3	0	0	0	0	0	0	0	0	0	0.0627
4	0	0	0	0	0	0	0	0	0.0007	0.1031
5	0	0	0	0	0	0	0	0.0004	0.0123	0.1644
6	0	0	0	0	0	0	0	0.0035	0.0425	0.1805
7	0	0	0	0	0	0	0	0.0148	0.0994	0.1878
8	0	0	0	0	0	0	0	0.0464	0.1492	0.1639
9	0	0	0	0	0	0	0	0.0597	0.1277	0.1682
10	0	0	0	0	0	0	0	0.1037	0.177	0.1702
College 5										
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0.0218
3	0	0	0	0	0	0	0	0	0	0.0475
4	0	0	0	0	0	0	0	0	0.0003	0.0862
5	0	0	0	0	0	0	0	0.0002	0.0062	0.1389
6	0	0	0	0	0	0	0	0.0017	0.0259	0.157
7	0	0	0	0	0	0	0	0.0102	0.0718	0.1835
8	0	0	0	0	0	0	0	0.0362	0.1259	0.1747
9	0	0	0	0	0	0	0	0.0614	0.1303	0.1697
10	0	0	0	0	0	0	0	0.1114	0.1597	0.1784
College 6										
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0.0122
3	0	0	0	0	0	0	0	0	0	0.0293
4	0	0	0	0	0	0	0	0	0.0001	0.0684
5	0	0	0	0	0	0	0	0	0.0024	0.1089
6	0	0	0	0	0	0	0	0.0007	0.0132	0.1293
7	0	0	0	0	0	0	0	0.0049	0.0459	0.1715
8	0	0	0	0	0	0	0	0.0224	0.0954	0.1866
9	0	0	0	0	0	0	0	0.045	0.1339	0.17
10	0	0	0	0	0	0	0	0.0877	0.1509	0.1871
College 7										
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0.0007
3	0	0	0	0	0	0	0	0	0	0.0075
4	0	0	0	0	0	0	0	0	0	0.0225
5	0	0	0	0	0	0	0	0	0	0.0407
6	0	0	0	0	0	0	0	0	0.0005	0.0521
7	0	0	0	0	0	0	0	0	0.004	0.1017
8	0	0	0	0	0	0	0	0	0.0145	0.1685
9	0	0	0	0	0	0	0	0	0.0578	0.172
10	0	0	0	0	0	0	0	0	0.1034	0.2199











**Table A7: College Attendance Proportions and Changes with \$3,000 Decrease (Increase) in State Subsidy (Tuition)**

Income Decile	Ability Decile																			
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10
	College 1										College 2									
1	0	0	0	0	0.0001	0.0001	0.0001	0.0001	0.0001	0	0	0	0	0	-0.016	-0.021	-0.023	-0.0303	-0.023	-0.0186
2	0	0	0	0	0.0208	0.036	0.0362	0.0348	0.0393	0.0343	0	0	0	0	-0.153	-0.226	-0.229	-0.2266	-0.232	-0.2099
3	0	0	0	0	0.1168	0.1889	0.1822	0.1748	0.1823	0.1489	0	0	0	0	-0.094	-0.12	-0.128	-0.1383	-0.1283	-0.0881
4	0	0	0	0	0.1753	0.286	0.2845	0.2861	0.2853	0.1772	0	0	0	0	-0.004	0.0161	0.0123	0.0155	0.0157	0.0151
5	0	0	0	0	0.1706	0.2667	0.2666	0.2663	0.2564	0.1016	0	0	0	0	0.0052	0.0191	0.0176	0.017	0.0179	0.0129
6	0	0	0	0	0.1619	0.2359	0.2359	0.2335	0.1976	0.0607	0	0	0	0	-0.043	-0.06	-0.063	-0.0637	-0.0572	-0.0218
7	0	0	0	0	0.1648	0.2828	0.2835	0.2771	0.1706	0.0377	0	0	0	0	-0.068	-0.059	-0.06	-0.0497	-0.0514	-0.0193
8	0	0	0	0	0.2371	0.3363	0.3382	0.3056	0.1284	0.0365	0	0	0	0	-0.068	-0.047	-0.047	-0.0175	-0.0443	-0.0237
9	0	0	0	0	0.2699	0.396	0.396	0.3496	0.1282	0.0465	0	0	0	0	-0.033	-0.025	-0.026	0.0217	-0.0485	-0.0186
10	0	0	0	0	0.279	0.4431	0.4453	0.3619	0.0718	0.0302	0	0	0	0	-0.019	-0.008	-0.008	0.0883	-0.0242	-0.0076
Income Decile	College 3										College 4									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0.0451	0	0	0	0	0	0	0	0	0.0046	
	0	0	0	0	0.1168	0.1889	0.1822	0.1748	0.1823	0.1489	0	0	0	0	-0.153	-0.226	-0.229	-0.2266	-0.232	-0.2099
	0	0	0	0	0.1753	0.286	0.2845	0.2861	0.2853	0.1772	0	0	0	0	-0.094	-0.12	-0.128	-0.1383	-0.1283	-0.0881
	0	0	0	0	0.1706	0.2667	0.2666	0.2663	0.2564	0.1016	0	0	0	0	-0.004	0.0161	0.0123	0.0155	0.0157	0.0151
	0	0	0	0	0.1619	0.2359	0.2359	0.2335	0.1976	0.0607	0	0	0	0	0.0052	0.0191	0.0176	0.017	0.0179	0.0129
	0	0	0	0	0.1648	0.2828	0.2835	0.2771	0.1706	0.0377	0	0	0	0	-0.068	-0.059	-0.06	-0.0497	-0.0514	-0.0193
	0	0	0	0	0.2371	0.3363	0.3382	0.3056	0.1284	0.0365	0	0	0	0	-0.068	-0.047	-0.047	-0.0175	-0.0443	-0.0237
	0	0	0	0	0.2699	0.396	0.396	0.3496	0.1282	0.0465	0	0	0	0	-0.033	-0.025	-0.026	0.0217	-0.0485	-0.0186
	0	0	0	0	0.279	0.4431	0.4453	0.3619	0.0718	0.0302	0	0	0	0	-0.019	-0.008	-0.008	0.0883	-0.0242	-0.0076
Income Decile	College 5										College 6									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0.0335	0	0	0	0	0	0	0	0	0.0032	
	0	0	0	0	0	0	0	0	0	0.0656	0	0	0	0	0	0	0	0	0.0029	
	0	0	0	0	0	0	0	0	0	0.0005	0.0968	0	0	0	0	0	0	-0.0007	-0.0049	-0.0075
	0	0	0	0	0	0	0	0	0	0.0002	0.0096	0.1577	0	0	0	0	0	-0.0002	-0.0027	-0.0067
	0	0	0	0	0	0	0	0	0	0.0018	0.0478	0.1873	0	0	0	0	0	-0.0017	0.0053	0.0068
	0	0	0	0	0	0	0	0	0	0.0084	0.1121	0.199	0	0	0	0	0	-0.0064	0.0127	0.0112
	0	0	0	0	0	0	0	0	0	0.0275	0.1684	0.1746	0	0	0	0	0	-0.0189	0.0192	0.0107
	0	0	0	0	0	0	0	0	0	0.0333	0.1572	0.173	0	0	0	0	0	-0.0264	0.0295	0.0048
	0	0	0	0	0	0	0	0	0	0.0469	0.1953	0.1736	0	0	0	0	0	-0.0568	0.0183	0.0034
Income Decile	College 7										College 8									
	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	0	0	0	0	0	0	0	0	0	0.0131	0	0	0	0	0	0	0	0	0.0015	
	0	0	0	0	0	0	0	0	0	0.0298	0	0	0	0	0	0	0	0	0.0008	
	0	0	0	0	0	0	0	0	0	0.0656	0	0	0	0	0	0	0	0	-0.0001	
	0	0	0	0	0	0	0	0	0	0.0001	0.049	0.1327	0	0	0	0	0	-0.0001	-0.0013	-0.0062
	0	0	0	0	0	0	0	0	0	0.0011	0.0293	0.1618	0	0	0	0	0	-0.0006	0.0034	0.0048
	0	0	0	0	0	0	0	0	0	0.0073	0.0811	0.1901	0	0	0	0	0	-0.0029	0.0093	0.0066
	0	0	0	0	0	0	0	0	0	0.0253	0.1382	0.1863	0	0	0	0	0	-0.0109	0.0123	0.0116
	0	0	0	0	0	0	0	0	0	0.0357	0.1531	0.1753	0	0	0	0	0	-0.0257	0.0228	0.0056
	0	0	0	0	0	0	0	0	0	0.061	0.1746	0.1803	0	0	0	0	0	-0.0504	0.0149	0.0019

**Table A8: College Attendance Proportions, Baseline Equilibrium**

Income Decile	Ability Decile									
	1	2	3	4	5	6	7	8	9	10
	State Colleges									
1	0	0	0	0	0.0319	0.0416	0.0455	0.0609	0.0462	0.0371
2	0	0	0	0	0.3468	0.5229	0.5302	0.5228	0.5426	0.4883
3	0	0	0	0	0.4217	0.6168	0.6212	0.6261	0.6211	0.4739
4	0	0	0	0	0.3578	0.5398	0.5445	0.5412	0.5392	0.3241
5	0	0	0	0	0.3308	0.4953	0.4979	0.4986	0.477	0.1773
6	0	0	0	0	0.4106	0.5921	0.598	0.5943	0.5096	0.165
7	0	0	0	0	0.4655	0.6845	0.686	0.6535	0.4441	0.114
8	0	0	0	0	0.6107	0.7662	0.7705	0.6463	0.3454	0.1205
9	0	0	0	0	0.6052	0.8419	0.8431	0.6557	0.3535	0.1302
10	0	0	0	0	0.5958	0.9026	0.9071	0.5472	0.192	0.0755
Private Colleges										
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0.1055
3	0	0	0	0	0	0	0	0	0.0001	0.2273
4	0	0	0	0	0	0	0	0	0.0029	0.4048
5	0	0	0	0	0	0	0	0.0016	0.0436	0.6439
6	0	0	0	0	0	0	0	0.012	0.1478	0.7213
7	0	0	0	0	0	0	0	0.0495	0.353	0.8344
8	0	0	0	0	0	0	0	0.1566	0.5517	0.8447
9	0	0	0	0	0	0	0	0.2225	0.5811	0.8457
10	0	0	0	0	0	0	0	0.395	0.7863	0.9165
All Colleges										
1	0	0	0	0	0.0319	0.0416	0.0455	0.0609	0.0462	0.0371
2	0	0	0	0	0.3468	0.5229	0.5302	0.5228	0.5426	0.5939
3	0	0	0	0	0.4217	0.6168	0.6212	0.6261	0.6212	0.7013
4	0	0	0	0	0.3578	0.5398	0.5445	0.5412	0.5421	0.7289
5	0	0	0	0	0.3308	0.4953	0.4979	0.5002	0.5206	0.8212
6	0	0	0	0	0.4106	0.5921	0.598	0.6063	0.6574	0.8864
7	0	0	0	0	0.4655	0.6845	0.686	0.7031	0.7971	0.9484
8	0	0	0	0	0.6107	0.7662	0.7705	0.8029	0.8971	0.9652
9	0	0	0	0	0.6052	0.8419	0.8431	0.8782	0.9346	0.9759
10	0	0	0	0	0.5958	0.9026	0.9071	0.9422	0.9783	0.992

**Table A9: College Attendance Proportions and Changes with \$8,000 Max Aid**

Income Decile	Ability Decile									
	1	2	3	4	5	6	7	8	9	10
	State Colleges									
1	0	0	0	0	0.0445	0.0546	0.0591	0.078	0.061	0.05
2	0	0	0	0	0.4483	0.5564	0.5624	0.5574	0.5749	0.492
3	0	0	0	0	0.4658	0.6073	0.6121	0.6169	0.612	0.4282
4	0	0	0	0	0.406	0.5402	0.5496	0.5476	0.5436	0.2827
5	0	0	0	0	0.3783	0.5245	0.5377	0.5384	0.5013	0.1533
6	0	0	0	0	0.4443	0.5942	0.6113	0.6073	0.4798	0.1271
7	0	0	0	0	0.5632	0.6712	0.6749	0.658	0.3712	0.0823
8	0	0	0	0	0.673	0.7557	0.7619	0.692	0.2825	0.1038
9	0	0	0	0	0.6734	0.8334	0.837	0.7532	0.3291	0.1267
10	0	0	0	0	0.7336	0.8967	0.9034	0.7604	0.1806	0.0726
Private Colleges										
1	0	0	0	0	0	0	0	0	0	0
2	0	0	0	0	0	0	0	0	0	0.0432
3	0	0	0	0	0	0	0	0	0	0.0001
4	0	0	0	0	0	0	0	0	0	0.039
5	0	0	0	0	0	0	0	0	0	-0.0002
6	0	0	0	0	0	0	0	0	0	-0.0037
7	0	0	0	0	0	0	0	0	0	-0.0218
8	0	0	0	0	0	0	0	0	0	-0.0696
9	0	0	0	0	0	0	0	0	0	-0.1215
10	0	0	0	0	0	0	0	0	0	-0.2366
All Colleges										
1	0	0	0	0	0.0445	0.0546	0.0591	0.078	0.061	0.05
2	0	0	0	0	0.4483	0.5564	0.5624	0.5574	0.5749	0.6407
3	0	0	0	0	0.4658	0.6073	0.6121	0.6169	0.6122	0.72
4	0	0	0	0	0.406	0.5402	0.5496	0.5476	0.5504	0.7684
5	0	0	0	0	0.3783	0.5245	0.5377	0.5399	0.5724	0.8686
6	0	0	0	0	0.4443	0.5942	0.6113	0.6156	0.6949	0.9182
7	0	0	0	0	0.5632	0.6712	0.6749	0.6857	0.8212	0.9609
8	0	0	0	0	0.673	0.7557	0.7619	0.7791	0.9119	0.9687
9	0	0	0	0	0.6734	0.8334	0.837	0.8542	0.9366	0.9756
10	0	0	0	0	0.7336	0.8967	0.9034	0.9187	0.9786	0.9919





**Table A14: College Attendance Proportions and Changes with \$3,000 Decrease (Increase) in State Subsidy (Tuition)**

Income Decile	Ability Decile																				
	State Colleges																				
	1	2	3	4	5	6	7	8	9	10	1	2	3	4	5	6	7	8	9	10	
1	0	0	0	0	0.0001	0.0001	0.0002	0.0003	0.0001	0.0001	0	0	0	0	-0.032	-0.042	-0.045	-0.0606	-0.0461	-0.037	
	2	0	0	0	0	0.0416	0.0721	0.0724	0.0697	0.0785	0.0685	0	0	0	0	-0.305	-0.451	-0.458	-0.4531	-0.4641	-0.4198
	3	0	0	0	0	0.2336	0.3778	0.3644	0.3496	0.3646	0.2978	0	0	0	0	-0.188	-0.239	-0.257	-0.2765	-0.2565	-0.1761
	4	0	0	0	0	0.3506	0.572	0.569	0.5723	0.5707	0.3544	0	0	0	0	-0.007	0.0322	0.0245	0.0311	0.0315	0.0303
	5	0	0	0	0	0.3411	0.5334	0.5332	0.5326	0.5129	0.2031	0	0	0	0	0.0103	0.0381	0.0353	0.034	0.0359	0.0258
	6	0	0	0	0	0.3238	0.4718	0.4719	0.467	0.3951	0.1215	0	0	0	0	-0.087	-0.12	-0.126	-0.1273	-0.1145	-0.0435
	7	0	0	0	0	0.3297	0.5656	0.5669	0.5542	0.3412	0.0755	0	0	0	0	-0.136	-0.119	-0.119	-0.0993	-0.1029	-0.0385
	8	0	0	0	0	0.4742	0.6725	0.6764	0.6112	0.2568	0.0729	0	0	0	0	-0.137	-0.094	-0.094	-0.0351	-0.0886	-0.0476
	9	0	0	0	0	0.5398	0.7921	0.792	0.6992	0.2564	0.093	0	0	0	0	-0.065	-0.05	-0.051	0.0435	-0.0971	-0.0372
	10	0	0	0	0	0.558	0.8861	0.8907	0.7237	0.1437	0.0604	0	0	0	0	-0.038	-0.017	-0.016	0.1765	-0.0483	-0.0151
Private Colleges																					
1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	2	0	0	0	0	0	0	0	0	0	0.1157	0	0	0	0	0	0	0	0	0.0102	
	3	0	0	0	0	0	0	0	0	0	0.2347	0	0	0	0	0	0	0	-0.0001	0.0074	
	4	0	0	0	0	0	0	0	0	0	0.0018	0.38	0	0	0	0	0	0	-0.0011	-0.0248	
	5	0	0	0	0	0	0	0	0	0	0.0006	0.0343	0.618	0	0	0	0	0	-0.001	-0.0093	-0.0259
	6	0	0	0	0	0	0	0	0	0	0.006	0.1662	0.7449	0	0	0	0	0	-0.006	0.0184	0.0236
	7	0	0	0	0	0	0	0	0	0	0.0264	0.3981	0.8676	0	0	0	0	0	-0.0231	0.0451	0.0332
	8	0	0	0	0	0	0	0	0	0	0.0885	0.6195	0.8933	0	0	0	0	0	-0.0681	0.0678	0.0486
	9	0	0	0	0	0	0	0	0	0	0.1186	0.6768	0.883	0	0	0	0	0	-0.1039	0.0957	0.0373
	10	0	0	0	0	0	0	0	0	0	0.1876	0.8365	0.9319	0	0	0	0	0	-0.2074	0.0502	0.0154
All Colleges																					
1	0	0	0	0	0.0001	0.0001	0.0002	0.0003	0.0001	0.0001	0	0	0	0	-0.032	-0.042	-0.045	-0.0606	-0.0461	-0.037	
	2	0	0	0	0	0.0416	0.0721	0.0724	0.0697	0.0785	0.1842	0	0	0	0	-0.305	-0.451	-0.458	-0.4531	-0.4641	-0.4097
	3	0	0	0	0	0.2336	0.3778	0.3644	0.3496	0.3647	0.5325	0	0	0	0	-0.188	-0.239	-0.257	-0.2765	-0.2565	-0.1688
	4	0	0	0	0	0.3506	0.572	0.569	0.5723	0.5725	0.7344	0	0	0	0	-0.007	0.0322	0.0245	0.0311	0.0304	0.0055
	5	0	0	0	0	0.3411	0.5334	0.5332	0.5326	0.5471	0.8211	0	0	0	0	0.0103	0.0381	0.0353	0.033	0.0265	-1E-04
	6	0	0	0	0	0.3238	0.4718	0.4719	0.4729	0.5614	0.8663	0	0	0	0	-0.087	-0.12	-0.126	-0.1334	-0.096	-0.0201
	7	0	0	0	0	0.3297	0.5656	0.5669	0.5806	0.7393	0.9431	0	0	0	0	-0.136	-0.119	-0.119	-0.1225	-0.0578	-0.0053
	8	0	0	0	0	0.4742	0.6725	0.6764	0.6998	0.8763	0.9662	0	0	0	0	-0.137	-0.094	-0.094	-0.1031	-0.0208	0.001
	9	0	0	0	0	0.5398	0.7921	0.792	0.8178	0.9332	0.976	0	0	0	0	-0.065	-0.05	-0.051	-0.0604	-0.0014	1E-04
	10	0	0	0	0	0.558	0.8861	0.8907	0.9114	0.9801	0.9923	0	0	0	0	-0.038	-0.017	-0.016	-0.0308	0.0018	0.0003

























