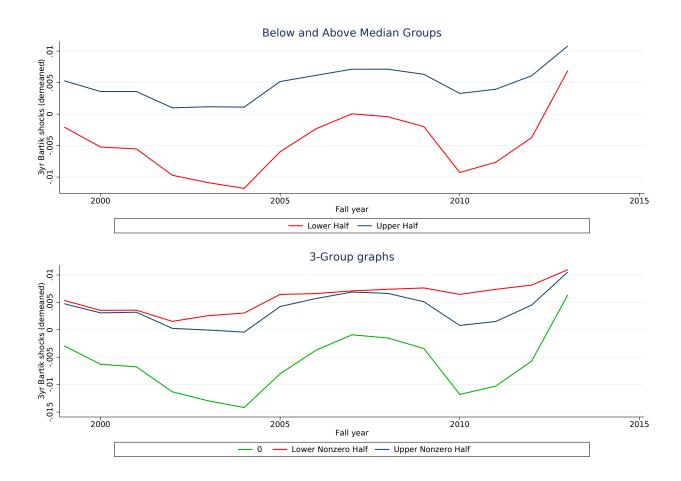
Online Appendix

Online Appendix: Not for Publication

Figure A-1: Demeaned Predicted Labor Demand Trends by For-Profit Supply



The top panel of this figure plots trends over time in 3-year rolling predicted labor demand changes that are residual to the CBSA-specific mean for CBSAs that have above and below median 2000 for-profit shares. In the bottom panel, we plot demeaned 3-year rolling predicted labor demand changes for CBSAs with no for-profits and for CBSAs with above and below median for-profit shares among those with any for-profit institutions.

Figure A-2: Pre-2000 Trends by For-Profit Supply, Below and Above Median

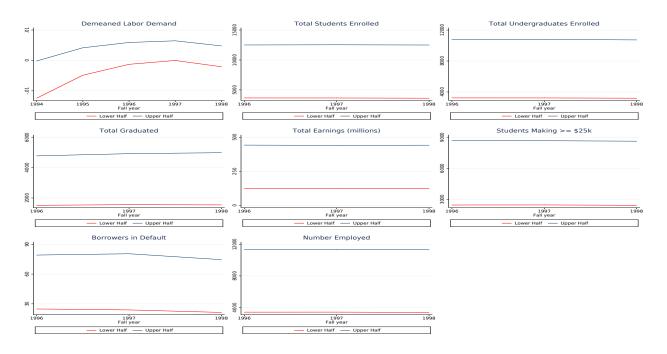
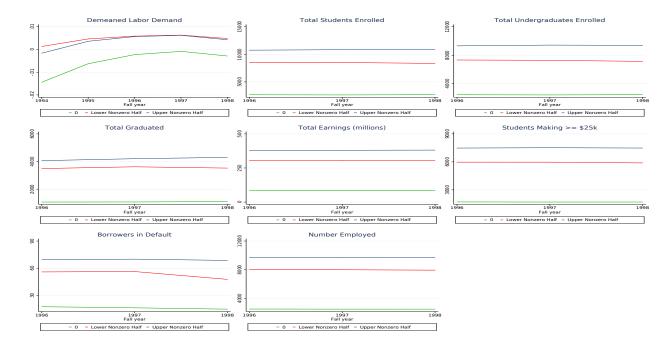


Figure A-3: Pre-2000 Trends by For-Profit Supply, Three Groups



These figures show demeaned (by CBSA) labor demand trends, enrollment, and outcome variables in the pre-2000 period for all institutions together without splitting into 2-year and 4-year schools. Figure A-2 shows trends in each variable over time for CBSAs below and above the median in the baseline for-profit supply distribution. Figure A-3 shows trends in each variable over time for CBSAs in 3 groups: the group with 0 for-profit supply, and below and above median groups in the non-zero baseline for-profit supply distribution.

Figure A-4: Pre-2000 Educational and Labor Market Outcome Trends by Labor Demand, Below and Above Median

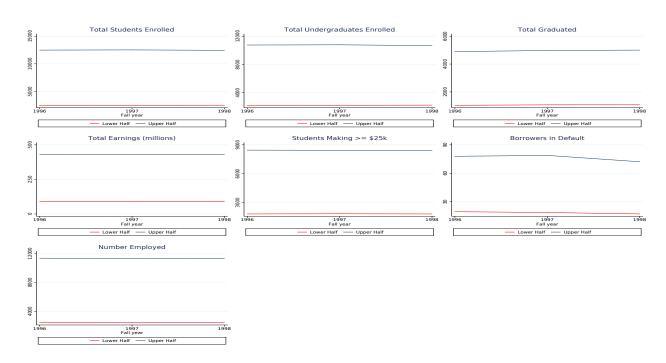
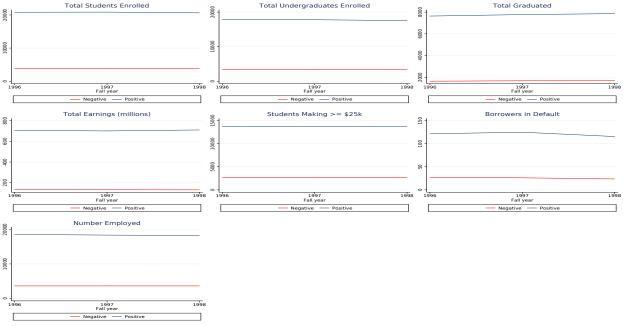
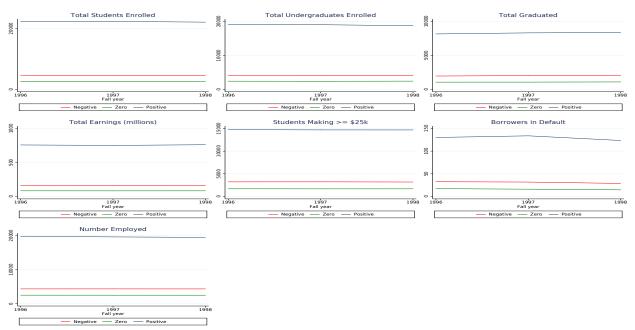


Figure A-5: Pre-2000 Educational and Labor Market Outcome Trends by Labor Demand, Below and Above Zero



These figures show enrollment and outcome variables in the pre-2000 period for all institutions together without splitting into 2-year and 4-year schools. Figure A-4 shows trends in each variable over time for CBSAs below and above the median in predicted labor demand as measured in 1998 ($\hat{\eta}_{1998}$). Figure A-5 shows trends in each variable over time for CBSAs with negative and positive predicted labor demand in 1998.

Figure A-6: Pre-2000 Trends in Educational and Labor Market Outcomes by Labor Demand x For-Profit Supply, Below and Above Zero



The figure shows pre-2000 enrollment and outcome variable trends for all institutions together without splitting into 2-year and 4-year schools. The trends in each variable over time for CBSAs with negative and positive labor demand interacted with for-profit supply as measured in 1998 ($\hat{\eta}_{1998} * Supply$) are shown.

Table A-1: Summary Statistics (2000-2006 and 2008-2014)

			2000-2006					2008-2014		
	All (1)	Four-year For-profit (2)	Four-year Public (3)	Four-year For-profit Four-year Public Two-year For-profit Two-year Public (2) (3)	Two-year Public (5)	(1)	Four-year For-profit (2)	Four-year Public (3)	Four-year Public Two-year For-profit Two-year Public (3)	Two-year Public (5)
Total Enrollment	6156.197	910.343	9717.594	1004.619	13135.733	7463.464	2745.476	11595.837	1627.857	13931.810
The described water Dancel	(25897)	(8071.361)	(23082.377)	(4313.047)	(44842.689)	(29950)	(22347.120)	(27822.572)	(6418.006)	(46875.134)
OHIGH THE COMPANY OF THE CONTROL OF	(24535)	(5956.145)	(17569.839)	(4308.577)	(44842.646)	(27833)	(17624.769)	(22410.841)	(6417.874)	(46875.151)
Number of (Subsidized) Direct Loan Recipients	357.550	40.773	1102.824	119.410	130.687	1454.541	1017.180	2836.262	696.371	1192.359
	(1773)	(505.335)	(3253.345)	(469.959)	(555.953)	(6299)	(9138.064)	(6888.767)	(2976.751)	(3439.840)
Number of (Unsubsidized) Direct Loan Recipients	250.269	32.041	773.510	80.08	80.534	1419.336	1087.316	2890.968	652.515	954.844
	(1232)	(415.995)	(2246.066)	(358.409)	(370.152)	(6419)	(9631.312)	(6968.402)	(2778.683)	(2787.825)
Number of (Subsidized) FFEL Loan Recipients	774.679	443.594	1533.651	484.082	(1325.456)	1214.201	1290.081	1853.813	656.079	999.410
Number of (Thenkeidized) FFFI. Loan Reciniante	570.853	308 865	1097.107	388.634	406.061	1083 867	1953 348	1644.839	598.512)	770 881
supplies to the meaning of the post from the post post post post post post post post	(2421)	(3470.651)	(2580.916)	(1668.136)	(987.504)	(6273)	(11351.095)	(3732.841)	(2349.925)	(1818.152)
Number of Federal Loans	2424.719	1201.736	5615.203	1351.328	1362.998	4828.849	4300.237	9085.814	2394.948	3234.379
	(8280)	(9166.746)	(11414.531)	(5486.907)	(2886.927)	(20293)	(32689.069)	(19016.569)	(9161.830)	(7495.655)
Total Loan Origination (in \$1000s)	9282.513	5193.591	23525.955	4199.072	3346.373	21027.653	19180.003	44878.628	8389.539	9891.863
	(36460)	(42359.200)	(51988.762)	(17647.477)	(7305.951)	(92936)	(1.52e+05)	(99038.418)	(32384.014)	(23094.140)
Number of Borrowers in Default, 100% completion time	55.177	52.317	62.430	53.106	52.483					
	(413)	(758.987)	(134.778)	(231.143)	(112.053)					
Total students employed 6 years after enrolling	5305.940	800.374	8942.683	749.428	10804.749					
200	(21530)	(7219:938)	(21009.909)	(5045.829)	(30008.290)	000	11	000	1000	0100010
Number of students graduating in 150% completion time	(8888)	(1468.518)	4910.105 (12037.518)	(2474.721)	(12172.253)	(6733)	(2099.620)	(7309.081)	(3668.473)	(10433.717)
Mean Earnings for non-enrolled students 6 years after enrolling	26	30594.390	33276.985	20208.066	23551.168					
	(7235)	(7791.449)	(6123.789)	(5333.664)	(3608.764)					
Share earning \$25k or more 6 years after enrolling	0.542	(0.110)	0.001	0.417	(0.076)					
In-State Tuition for full-time undergraduates	3871.585	10876.063	3145.070	9285.528	1840.209	6273.606	14533.118	5348.690	12331.759	2759.385
	(3617)	(2659.258)	(1752.140)	(3433.088)	(1151.746)	(4878)	(3041.327)	(2557.496)	(2995.120)	(1450.312)
3-year Labor Demand Shock	-1.312	-1.313	-1.313	-1.310	-1.310	-0.908	-0.905	-0.905	-0.912	-0.912
	(1.9)	(1.861)	(1.861)	(1.842)	(1.842)	(1.7)	(1.731)	(1.731)	(1.736)	(1.736)
Base employment in 1999-2000	1.34e + 05	1.30e+05	1.30e+05	1.38e+05	1.38e+05	1.45e + 05	1.41e+05	1.41e+05	1.49e + 05	1.49e + 05
	(444554)	(4.36e+05)	(4.36e+05)	(4.53e+05)	(4.53e+05)	(474920)	(4.67e+05)	(4.67e+05)	(4.84e+05)	(4.84e+05)
% For-Profit schools in 2000	14.697	2.599	2.599	27.832	27.832	14.818	2.529	2.529	28.115	28.115
	(25)	(10.351)	(10.351)	(29.119)	(29.119)	(22)	(9.911)	(9.911)	(29.138)	(29.138)
Observations	21344	5554	5554	5118	5118	21304	5532	5532	5120	5120

Means of variables reported in cells with standard deviations in parentheses. All years are indexed by spring of the academic year. Predicted labor demand shocks are constructed using equation (1) in the text. Two-digit industry employment data from QCEW are used for computation of predicted labor demand changes. Number of borrowers in default relate to imputed freshmen cohorts assuming 100% completion time (four years for 4-year and two years for 2-year institutions). All years are indexed by calendar year in the spring of the academic year. Both total and undergraduate enrollment refer to twelve-month enrollment.

Table A-2: Summary Statistics: Student Composition (2000-2014)

	All (1)	Four-year For-profit (2)	Four-year Public (3)	Two-year For-profit (4)	Two-year Public (5)
% Undergraduates Black	13.490	19.343	10.974	16.457	11.803
~	(16.706)	(17.679)	(16.044)	(19.418)	(14.007)
% Undergraduates Hispanic	8.098	8.456	7.172	9.423	7.661
O/ II 1 1 1 III 1	(14.115)	(11.260)	(13.132)	(16.378)	(13.374)
% Undergraduates White	68.239	51.820	69.623	67.019	71.457
07 II 1 1 4 E 1	(22.663)	(23.101)	(20.893)	(25.625)	(19.761)
% Undergraduates Female	65.347	57.047	55.698	83.813	59.816
07 II. danona duatas Oven 25	(17.204)	(17.219)	(7.460)	(17.143)	(10.084)
% Undergraduates Over 25	31.296	50.109	20.531	29.500	35.692
07 Undergreducted Desciping Dell great	(20.408)	(25.874)	(13.567)	(21.564)	(17.742)
% Undergraduates Receiving Pell grant	48.013	(16.820)	34.988	64.438	40.776
% Undergraduates Receiving Federal Loans	(20.046)	(16.829)	(12.354)	(17.053) 61.824	(16.169)
% Undergraduates Receiving Federal Loans	$46.210 \\ (27.394)$	75.793 (15.370)	50.597 (15.424)	(23.943)	24.094 (21.201)
% Undergraduates Sending FAFSA to 1 College	(27.594) 74.534	80.828	59.156	84.505	76.012
70 Ondergraduates bending PAFSA to 1 Conege	(13.360)	(9.080)	(10.006)	(10.226)	(8.501)
% Undergraduates Sending FAFSA to 2 Colleges	15.930	13.263	20.996	12.620	15.550
70 Ondergraduates bending PATSA to 2 Coneges	(7.663)	(7.228)	(4.911)	(9.503)	(5.895)
% Undergraduates Sending FAFSA to 3 Colleges	4.099	2.379	7.524	1.612	$\frac{(3.899)}{3.999}$
70 Ondergraduates bending 1711 bit to 5 Coneges	(2.890)	(1.604)	(2.343)	(1.476)	(1.852)
% Undergraduates Sending FAFSA to 4 Colleges	2.049	1.162	4.403	0.495	1.830
70 Chacigradates schame 1711 Srt to 4 Coneges	(1.973)	(1.159)	(2.105)	(0.675)	(1.073)
% Undergraduates Sending FAFSA to 5 Colleges	3.390	2.349	7.917	0.741	2.639
,, onacigradaces sename 1111 sil es e consess	(4.225)	(2.510)	(5.837)	(1.097)	(1.840)
% Parents with HS Diploma	36.661	16.318	33.439	34.213	44.652
	(17.849)	(16.174)	(12.423)	(20.300)	(14.417)
% Parents with MS	4.386	1.993	2.573	4.574	5.895
	(4.120)	(2.435)	(2.477)	(4.664)	(4.142)
% Parents with College Degree	39.978	17.895	$56.76\overset{\circ}{3}$	28.500	42.080
	(21.278)	(17.736)	(22.197)	(16.824)	(14.115)
Average Family Income	37420.04	$\dot{43060.09}$	59564.69	27826.09	29848.79
	(17741.83)	(1661.96)	(16787.21)	(10059.62)	(9365.87)
Average SAT score	1028.490	1010.418	1036.884	977.352	904.709
	(94.244)	(101.712)	(90.246)	(81.539)	(59.776)
% Arts degrees	36.157	40.771	60.632	8.339	39.950
	(26.645)	(26.099)	(13.915)	(15.870)	(20.451)
% STEM degrees	35.202	43.619	31.286	29.996	39.752
	(23.304)	(27.021)	(12.572)	(31.796)	(18.637)
% Vocational degrees	27.572	9.481	7.684	60.083	20.168
	(30.857)	(12.366)	(6.168)	(38.150)	(13.849)
% Associates Degrees	30.425	42.771	9.414	13.758	53.151
	(32.391)	(29.163)	(19.431)	(23.670)	(28.947)
% Bachelors Degrees	27.630	28.153	68.203	0.005	0.001
	(34.403)	(21.751)	(19.470)	(0.189)	(0.025)
% Certificates	44.126	10.531	1.872	86.237	46.848
	(39.358)	(16.136)	(5.978)	(23.680)	(28.947)
Observations	47504	11876	11876	11876	11876

Means of variables reported in cells, with standard deviations in parentheses. % tabulations range from 0-100.

Table A-3: Summary Statistics: CBSA-level Variables (2000-2014)

Population Count (1000s)	344.531
	(1093.869)
Percentage Female	0.506
	(0.014)
Percentage White	0.850
	(0.140)
Percentage Black	0.100
	(0.131)
Percentage American Indian	0.015
	(0.045)
Percentage Asian	0.019
	(0.038)
Percentage Two or more races	0.017
	(0.019)
Percentage Hispanic	0.092
	(0.139)
Percentage Age 0-19 years	0.274
	(0.029)
Percentage Age 20-29 years	0.139
	(0.037)
Percentage Age 30-39 years	0.126
	(0.015)
Percentage Age 40+ years	0.460
	(0.056)
Poverty Rate	0.146
	(0.050)
Observations	47504

Means of variables reported in cells, with standard deviations in parentheses. Percentage and rate tabulations range from 0-1.

Table A-4: OLS Estimates of the Effect of For-profit Attendance on the Number and Volume of Student Loan Originations and Defaults

				Panel A: Nun	inci of Loans			
		4-year	Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.528***	0.530***	0.529***	0.530***	0.044***	0.056***	0.043***	0.054***
	(0.003)	(0.003)	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)
Enroll*For-profit	0.818***	0.821***	0.817***	0.820***	1.043***	1.097***	1.032***	1.086***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.010)	(0.010)	(0.010)	(0.010)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23752	23752	23752	23752	21936	21936	21936	21936
			Pane	l B: Loan Orig	ination Amount	(\$)		
		4-year	Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	2664.60***	2680.00***	2672.70***	2688.70***	129.85***	166.81***	124.27***	160.92***
	(13.96)	(14.03)	(13.90)	(13.95)	(4.18)	(4.29)	(4.21)	(4.32)
Enroll*For-profit	3484.00***	3500.80***	3475.50***	3492.20***	3755.00***	3921.00***	3715.90***	3881.30***
	(20.18)	(20.34)	(20.19)	(20.33)	(31.47)	(31.23)	(31.66)	(31.41)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23752	23752	23752	23752	21936	21936	21936	21936
			Panel C: N	Number of Born	rowers in Defau	lt (100%)		
		4-year	Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.004***	0.003***	0.004***	0.003***	0.001***	0.001***	0.001***	0.001***
	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)	(0.000)
Enroll*For-profit	0.023***	0.022***	0.024***	0.023***	0.041***	0.043***	0.040***	0.042***
-	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)	(0.001)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	15463	15463	15463	15463	14616	14616	14616	14616

Authors estimates of equation (5) in the text by OLS using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,**** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-5: OLS Estimates of the Effect of For-profit Attendance on Student Borrowing, by Loan Type

			Panel A: Nu	mber Recipient	ts: Direct Sub	osidized Loa	ins	
		4-yea	ar Schools			2-yea	r Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.168***	0.168***	0.168***	0.168***	0.026***	0.031***	0.025***	0.030***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Enroll*For-profit	0.102***	0.107***	0.101***	0.106***	0.277***	0.300***	0.273***	0.296***
•	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)	(0.006)	(0.005)	(0.006)
Time Fixed Effect Type	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23752	23752	23752	23752	21936	21936	21936	21936
			Panel B: Num	ber Recipients	: Direct Unsu	ıbsidized Lo	oans	
		4-yea	ar Schools			2-yea	r Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.149***	0.149***	0.149***	0.150***	0.021***	0.026***	0.021***	0.025***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.001)	(0.001)	(0.001)	(0.001)
Enroll*For-profit	0.131***	0.136***	0.131***	0.136***	0.270***	0.291***	0.266***	0.287***
-	(0.003)	(0.003)	(0.003)	(0.003)	(0.005)	(0.005)	(0.005)	(0.005)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23752	23752	23752	23752	21936	21936	21936	21936
			Panel C: Nu	mber Recipient	ts: FFEL Sub	sidized Loa	ins	
		4-yea	ar Schools			2-yea	r Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.127***	0.129***	0.127***	0.129***	0.003***	0.005***	0.003***	0.004***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Enroll*For-profit	0.388***	0.386***	0.388***	0.386***	0.264***	0.275***	0.261***	0.272***
	(0.002)	(0.002)	(0.002)	(0.002)	(0.004)	(0.004)	(0.004)	(0.004)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	17426	17426	17426	17426	16082	16082	16082	16082
			Panel D: Nun	ber Recipients	: FFEL Unsu	ıbsidized Lo	oans	
		4-yea	ar Schools			2-yea	r Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.100***	0.102***	0.100***	0.102***	0.000	0.002***	-0.000	0.002***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Enroll*For-profit	0.396***	0.395***	0.396***	0.395***	0.227***	0.239***	0.224***	0.236***
	(0.001)	(0.001)	(0.001)	(0.001)	(0.003)	(0.003)	(0.003)	(0.003)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
	3.7	Yes	No	Yes	No	Yes	No	Yes
State*FP & Year*FP	No	res	NO	ies	NO	ies	110	res

Authors estimates of equation (5) in the text by OLS using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,**,*** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-6: OLS Estimates of the Effect of For-profit Attendance on Employment, Earnings, and Graduation

			assuming 150% Co	
		Schools		Schools
	(1)	(2)	(3)	(4)
Enroll	0.329***	0.328***	0.274***	0.268***
	(0.003)	(0.003)	(0.001)	(0.001)
Enroll*For-profit	-0.246***	-0.250***	0.750***	0.726***
	(0.004)	(0.004)	(0.009)	(0.009)
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes
Observations	19022	19022	17560	17560
			oyed, 6 years after	
	4-year	Schools		Schools
	(1)	(2)	(3)	(4)
Enroll	0.908***	0.908***	0.788***	0.791***
	(0.001)	(0.001)	(0.001)	(0.001)
Enroll*For-profit	-0.043***	-0.046***	-0.337***	-0.325***
	(0.002)	(0.002)	(0.007)	(0.007)
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes
Observations	9516	9516	8774	8774
			igs, 6 years after er	
	4-year	Schools		Schools
	(1)	(2)	(3)	(4)
Enroll	37591.40***	37485.30***	23900.90***	24042.30***
	(66.97)	(66.74)	(47.55)	(50.62)
Enroll*For-profit	-23.15	-226.55	-11743.30***	-10920.40***
	(156.89)	(158.16)	(434.20)	(443.13)
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes
Observations	9516	9516	8774	8774
			king \$25k, 6 years	
	4-year	Schools		Schools
	(1)	(2)	(3)	(4)
Enroll	0.710***	0.708***	0.505***	0.507***
	(0.001)	(0.001)	(0.001)	(0.001)
Enroll*For-profit	-0.024***	-0.027***	-0.229***	-0.212***
	(0.002)	(0.002)	(0.009)	(0.009)
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes
Observations	9516	9516	8774	8774

Authors estimates of equation (5) in the text by OLS using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,*** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-7: First Stage Enrollment Estimates Using Base Year % For Profit Enrollment as Supply Measure

Panel A: 4 year schools	2000	0-2014	2000	0-2006	2008-	2014
	(1)	(2)	(3)	(4)	(5)	(6)
$(2000 \text{ For-profit Supply})*\hat{\eta}$	-139.310	-127.050	9.254	13.594	37.402	40.709*
	(207.590)	(188.620)	(88.777)	(83.865)	(25.446)	(23.604)
$(For\text{-profit})^*(2000 \text{ Supply})^*\hat{\eta}$	-121.430	-121.430	-132.560	-132.560	-247.130***	-247.130***
	(154.310)	(156.660)	(122.200)	(123.900)	(32.499)	(32.948)
	[-0.787]	[-0.775]	[-1.085]	[-1.070]	[-7.604]	[-7.501]
Time Fixed Effects	Year	State*Year	Year	State*Year	Year	State*Year
State*FP & Year*FP	Yes	Yes	Yes	Yes	Yes	Yes
Observations	23178	23178	10876	10876	10952	10952
R-squared	0.220	0.230	0.261	0.264	0.219	0.224
P-value ¹	0.332	0.316	0.225	0.221	0.000	0.000
Panel B: 2 year schools	2000	0-2014	2000	0-2006	2008-	2014
	(1)	(2)	(3)	(4)	(5)	(6)
$(2000 \text{ For-profit Supply})*\hat{\eta}$	7.666	5.542	18.689	16.699	-1.847	-2.783
	(10.803)	(10.871)	(12.726)	(12.897)	(6.135)	(6.323)
$(For-profit)*(2000 Supply)*\hat{\eta}$	-18.674	-18.674	-40.425	-40.425	4.139	4.139
	(20.811)	(21.157)	(25.552)	(25.940)	(11.667)	(11.842)
	[-0.897]	[-0.883]	[-1.582]	[-1.558]	[0.355]	[0.349]
Time Fixed Effects	Year	State*Year	Year	State*Year	Year	State*Year
State*FP & Year*FP	Yes	Yes	Yes	Yes	Yes	Yes
Observations	21292	21292	9984	9984	10072	10072
R-squared	0.203	0.206	0.210	0.211	0.195	0.197
P-value ¹	0.100	0.163	0.121	0.017	0.896	0.824

Authors estimates of equation (4) in the text using for-profit and public institutions. The dependent variable is total 12-month enrollment aggregated by CBSA, sector (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *, ***, **** indicate significance at the 10, 5, and 1 percent level, respectively. "P-value" shows the p-value of F-tests for joint significance of instruments. Labor demand shocks are proxied by three-year rolling predicted changes as described in the text. Two- digit industry employment data from QCEW are used for computation of labor demand shocks. The supply measure is percentage of enrollment in for-profit institutions at the corresponding level (two-year or four-year) in the CBSA in 2000 or 2007 (for 2008-14 period). All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (% female), racial composition (% black, %Hispanic, %American Indian, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty and total population. All regressions also include CBSA and year fixed effects, while even columns include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-8: First Stage Enrollment Estimates, Excluding Selective Institutions

Panel A: 4 year schools	2000-	-2014	2000-	-2006	2008-	2014
	(1)	(2)	(3)	(4)	(5)	(6)
$(2000 \text{ For-profit Supply})*\hat{\eta}$	13.746	26.385	40.973	47.126	87.094***	88.355***
	(45.594)	(42.005)	(36.383)	(35.133)	(23.894)	(23.892)
(For-profit)*(2000 Supply)* $\hat{\eta}$	-210.380***	-210.380***	-150.010***	-150.010***	-288.110***	-288.110***
	(59.056)	(59.939)	(53.245)	(53.970)	(69.179)	(70.129)
	[-3.562]	[-3.510]	[-2.817]	[-2.779]	[-4.165]	[-4.108]
Time Fixed Effects	Year	State*Year	Year	State*Year	Year	State*Year
State*FP & Year*FP	No	No	No	No	No	No
Observations	23482	23482	11044	11044	10954	10954
R-squared	0.180	0.190	0.232	0.235	0.132	0.137
P-value ¹	0.002	0.002	0.002	0.003	0.000	0.000
Panel B: 4 year schools	2000-	-2014	2000-	-2006	2008-	2014
	(1)	(2)	(3)	(4)	(5)	(6)
$(2000 \text{ For-profit Supply})*\hat{\eta}$	24.566	37.205	54.694	60.847*	92.066***	93.326***
	(42.704)	(41.812)	(33.517)	(32.544)	(20.323)	(21.406)
(For-profit)*(2000 Supply)* $\hat{\eta}$	-232.020***	-232.020***	-177.450***	-177.450***	-298.050***	-298.050***
	(72.057)	(73.138)	(50.380)	(51.069)	(60.617)	(61.453)
	[-3.220]	[-3.172]	[-3.522]	[-3.475]	[-4.917]	[-4.850]
Time Fixed Effects	Year	State*Year	Year	State*Year	Year	State*Year
State*FP & Year*FP	Yes	Yes	Yes	Yes	Yes	Yes
Observations	23482	23482	11044	11044	10954	10954
R-squared	0.230	0.239	0.285	0.287	0.204	0.209
P-value ¹	0.006	0.007	0.000	0.001	0.000	0.000

Authors estimates of equation (4) in the text using for-profit and public institutions, excluding all institutions with a rating of "Highly Competitive" or higher in the 2001 Barron's rankings. The dependent variable is total 12-month enrollment aggregated by CBSA, sector (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *, ***, *** indicate significance at the 10, 5, and 1 percent level, respectively. "P-value" shows the p-value of F-tests for joint significance of instruments. Labor demand shocks are proxied by three-year rolling predicted changes as described in the text. Two- digit industry employment data from QCEW are used for computation of labor demand shocks. The supply measure is percentage of for-profit institutions at the corresponding level (two-year or four-year) in the CBSA in 2000 or 2007 (for 2008-14 period). All regressions include the following CBSA-year level variables as controls: base-year employment, gender composition (% female), racial composition (% black, %Hispanic, %American Indian, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty and total population. All regressions also include CBSA and year fixed effects, while even columns include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-9: Instrumental Variables Estimates of the Effect of For-profit Attendance on the Number and Volume of Student Loan Originations and Defaults, Excluding Selective Institutions

		Panel A: Nu	ımber of Loans	
		4-year	Schools	
	(1)	(2)	(3)	(4)
Enroll	0.449***	0.501***	0.467**	0.515***
	(0.167)	(0.124)	(0.201)	(0.164)
Enroll*For-profit	1.120***	1.044***	1.214***	1.156***
	(0.311)	(0.257)	(0.339)	(0.297)
Time Fixed Effects	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes
Observations	23432	23432	23432	23432
	Pan		igination Amou	int (\$)
			Schools	
	(1)	(2)	(3)	(4)
Enroll	1531.30***	1906.80***	1626.80***	1979.70***
	(465.52)	(290.02)	(590.00)	(338.95)
Enroll*For-profit	3591.40***	3045.20***	4083.70***	3646.00***
	(1141.40)	(1008.80)	(1191.00)	(988.24)
Time Fixed Effects	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes
Observations	23432	23432	23432	23432
	Panel C:	Number of Bo	rrowers in Defa	ault (100%)
		4-year	Schools	
	(1)	(2)	(3)	(4)
Enroll	0.065*	0.059*	0.057*	0.052*
	(0.037)	(0.031)	(0.034)	(0.028)
Enroll*For-profit	0.108***	0.116***	0.100***	0.105***
	(0.039)	(0.042)	(0.038)	(0.041)
Time Fixed Effects	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes
Observations	15326	15326	15326	15326

Authors estimates of equation (5) in the text using for-profit and public institutions, excluding all institutions with a rating of "Highly Competitive" or higher in the 2001 Barron's rankings. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,**,**** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-10: Instrumental Variables Estimates of the Effect of For-profit Attendance on Borrowing, by Loan Type Excluding Selective Institutions

	Panel A:		cipients: Direct	t Subsidized Lo	oans
		4-yea	ar Schools		
	(1)	(2)	(3)	(4)	
Enroll	0.352**	0.340**	0.363**	0.347*	
	(0.162)	(0.157)	(0.183)	(0.177)	
Enroll*For-profit	0.608**	0.625**	0.664**	0.684**	
	(0.303)	(0.294)	(0.314)	(0.315)	
Time Fixed Effects	Year	Year	State*Year	State*Year	
State*FP & Year*FP	No	Yes	No	Yes	
Observations	23432	23432	23432	23432	
	Panel B: N	Number Reci	pients: Direct	Unsubsidized I	oans
		4-yea	ar Schools		
	(1)	(2)	(3)	(4)	
Enroll	0.308**	0.305**	0.322**	0.314**	
	(0.133)	(0.120)	(0.155)	(0.144)	
Enroll*For-profit	0.536**	0.541**	0.606**	0.616**	
	(0.242)	(0.236)	(0.266)	(0.267)	
Time Fixed Effects	Year	Year	State*Year	State*Year	
State*FP & Year*FP	No	Yes	No	Yes	
Observations	23432	23432	23432	23432	
	Panel C:	Number Re	cipients: FFEL	Subsidized Lo	ans
		4-yea	ar Schools		
	(1)	(2)	(3)	(4)	
Enroll	0.154**	0.163***	0.172**	0.179**	
	(0.068)	(0.061)	(0.080)	(0.070)	
Enroll*For-profit	0.461***	0.450***	0.487***	0.479***	
	(0.116)	(0.113)	(0.130)	(0.130)	
Time Fixed Effects	Year	Year	State*Year	State*Year	
State*FP & Year*FP	No	Yes	No	Yes	
Observations	17256	17256	17256	17256	
	Panel D: N	Number Reci	pients: FFEL	Unsubsidized I	oans
		4-yea	ar Schools		
	(1)	(2)	(3)	(4)	
Enroll	0.099**	0.111**	0.113*	0.123**	
	(0.050)	(0.044)	(0.058)	(0.050)	
Enroll*For-profit	0.419***	0.405***	0.440***	0.428***	
	(0.076)	(0.076)	(0.086)	(0.087)	
Time Fixed Effects	Year	Year	State*Year	State*Year	
State*FP & Year*FP	No	Yes	No	Yes	
		17256	17256	17256	

Authors estimates of equation (5) in the text using for-profit and public institutions, excluding all institutions with a rating of "Highly Competitive" or higher in the 2001 Barron's rankings. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,**** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-11: Instrumental Variables Estimates of the Effect of For-profit Attendance on Graduation, Employment, and Earnings, Excluding Selective Institutions

	Panel A: Total	Graduated, assuming 150% Completion Time
	1 and 11. 100ar	4-year Schools
	(1)	(2)
Enroll	0.368***	0.363***
	(0.082)	(0.070)
Enroll*For-profit	-0.215	-0.211
•	(0.215)	(0.226)
Time Fixed Effects	State*Year	State*Year
State*FP & Year*FP	No	Yes
Observations	18816	18816
	Panel B: Nı	ımber Employed, 6 years after enrollment
		4-year Schools
	(1)	(2)
Enroll	0.858***	0.873***
	(0.029)	(0.022)
Enroll*For-profit	-0.095**	-0.112***
	(0.044)	(0.048)
Time Fixed Effects	State*Year	State*Year
State*FP & Year*FP	No	Yes
Observations	9436	9436
-	Panel C:	Total Earnings, 6 years after enrollment
		4-year Schools
	(1)	(2)
Enroll	35379.70***	36156.00***
	(3399.90)	(2866.50)
Enroll*For-profit	-5657.80	-6486.70
	(6402.00)	(6665.10)
Time Fixed Effects	State*Year	State*Year
State*FP & Year*FP	No	Yes
Observations	9436	9436
	Panel D: Total	Students Making \$25k, 6 years after enrollment
		4-year Schools
	(1)	(2)
Enroll	0.694***	0.705***
	(0.051)	(0.043)
Enroll*For-profit	-0.084	-0.095
	(0.099)	(0.107)
Time Fixed Effect Type	State*Year	State*Year
State*FP & Year*FP	No	Yes
Observations	9436	9436

Authors estimates of equation (5) in the text using for-profit and public institutions, excluding all institutions with a rating of "Highly Competitive" or higher in the 2001 Barron's rankings. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,**** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and state-by-year fixed effects. Even columns include state-for profit and year-for profit fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-12: Instrumental Variables Estimates of the Effect of For-profit Attendance on the Number and Volume of Student Loan Originations and Defaults, Including Baseline Degree Composition X Year Controls

				Panel A: Num	nber of Loans					
		4-year	Schools			2-year	Schools			
	(1)	(2)	(3)	(4)	$\overline{}$ (5)	(6)	(7)	(8)		
Enroll	0.441***	0.468***	0.453***	0.477***	0.103	0.124	0.083	0.120		
	(0.138)	(0.112)	(0.157)	(0.138)	(0.119)	(0.147)	(0.197)	(0.300)		
Enroll*For-profit	1.016***	0.983***	1.078***	1.056***	1.391**	1.518*	1.276	1.491		
	(0.265)	(0.252)	(0.276)	(0.267)	(0.674)	(0.909)	(1.136)	(1.901)		
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year		
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes		
Observations	23482	23482	23482	23482	21666	21666	21666	21666		
			Panel	B: Loan Origi	ination Amount	(\$)				
		4-year	Schools			2-year	Schools			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
Enroll	1438.80***	1700.70***	1502.70***	1754.20***	617.12	759.67	782.95	1211.30		
	(411.06)	(381.13)	(432.22)	(320.68)	(376.36)	(480.96)	(616.15)	(1279.10)		
Enroll*For-profit	2954.20**	2631.70**	3291.30***	3065.00***	6566.70***	7609.70**	7552.10**	10524.90		
	(1175.60)	(1151.90)	(1107.60)	(1050.10)	(2198.60)	(3164.20)	(3720.70)	(8599.30)		
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year		
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes		
Observations	23482	23482	23482	23482	21666	21666	21666	21666		
			Panel C: N	umber of Born	owers in Default	owers in Default (100%)				
		4-year	Schools			2-year	Schools			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
Enroll	0.066*	0.062**	0.060*	0.055*	0.026*	0.044	0.040	0.201		
	(0.036)	(0.031)	(0.036)	(0.030)	(0.014)	(0.042)	(0.047)	(1.275)		
Enroll*For-profit	0.109***	0.114***	0.104***	0.106***	0.211**	0.350	0.311	1.485		
	(0.037)	(0.039)	(0.039)	(0.040)	(0.101)	(0.314)	(0.338)	(9.290)		
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year		
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes		
Observations	15347	15347	15347	15347	14500	14500	14500	14500		

Authors estimates of equation (5) in the text using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,**** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. All 2-year estimates include %Certificates Degrees awarded in the baseline year interacted with year dummies, while all 4-year estimates include %Bachelors Degrees awarded in the baseline year interacted with year dummies. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-13: Instrumental Variables Estimates of the Effect of For-profit Attendance on Student Borrowing, by Loan Type Including Baseline Degree Composition X Year Controls

]	Panel A: Num	ber Recipients	s: Direct Sul	osidized L	oans				
		4-yea	ar Schools	-		2-ye	ear Schools				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)			
Enroll	0.343**	0.329**	0.353**	0.338*	0.011	0.006	-0.024	-0.056			
	(0.154)	(0.158)	(0.177)	(0.182)	(0.121)	(0.155)	(0.209)	(0.371)			
Enroll*For-profit	0.613**	0.634**	0.673**	0.696**	0.183	0.139	-0.025	-0.258			
•	(0.276)	(0.275)	(0.282)	(0.290)	(0.714)	(0.995)	(1.244)	(2.409)			
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes			
Observations	23482	23482	23482	23482	21666	21666	21666	21666			
		Pa	anel B: Numb	er Recipients:	Direct Unst	ıbsidized l	Loans				
		4-yea	ar Schools			2-ye	ear Schools				
	(1)	(2)	(3)	(4)	$\overline{(5)}$	(6)	(7)	(8)			
Enroll	0.297**	0.290**	0.310**	0.301**	0.020	0.020	-0.013	-0.031			
	(0.122)	(0.116)	(0.144)	(0.141)	(0.106)	(0.134)	(0.184)	(0.316)			
Enroll*For-profit	0.519**	0.532**	0.590**	0.608**	0.241	0.233	0.048	-0.096			
•	(0.215)	(0.220)	(0.234)	(0.244)	(0.623)	(0.853)	(1.093)	(2.047)			
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes			
Observations	23482	23482	23482	23482	21666	21666	21666	21666			
]	Panel C: Num	ber Recipients	s: FFEL Sul	FEL Subsidized Loans					
	-	4-yea	ar Schools	_		2-year Schools					
	(1)	(2)	(3)	(4)	$\overline{(5)}$	(6)	(7)	(8)			
Enroll	0.155**	0.165**	0.174**	0.184**	-0.012	-0.012	-0.065	-0.105			
	(0.069)	(0.065)	(0.084)	(0.078)	(0.031)	(0.044)	(0.070)	(0.163)			
Enroll*For-profit	0.457***	0.444***	0.485***	0.476***	0.115	0.103	-0.237	-0.541			
	(0.117)	(0.111)	(0.135)	(0.132)	(0.196)	(0.287)	(0.458)	(1.134)			
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes			
Observations	17290	17290	17290	17290	15946	15946	15946	15946			
		P	anel D: Numb	er Recipients:	FFEL Unst	ıbsidized l	Loans				
		4-yea	ar Schools			2-ye	ear Schools				
	(1)	(2)	(3)	(4)	$\overline{}$ (5)	(6)	(7)	(8)			
Enroll	0.095*	0.106**	0.109*	0.120**	0.007	0.015	-0.023	-0.032			
	(0.050)	(0.046)	(0.060)	(0.055)	(0.024)	(0.034)	(0.044)	(0.085)			
Enroll*For-profit	0.414***	0.401***	0.435***	0.425***	$0.241^{'}$	$0.275^{'}$	0.041	$-0.045^{'}$			
-	(0.074)	(0.072)	(0.085)	(0.085)	(0.149)	(0.225)	(0.280)	(0.575)			
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes			
Observations	17290	17290	17290	17290	15946	15946	15946	15946			

Authors estimates of equation (5) in the text using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,*** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. All 2-year estimates include %Certificates Degrees awarded in the baseline year interacted with year dummies, while all 4-year estimates include %Bachelors Degrees awarded in the baseline year interacted with year dummies. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-14: Instrumental Variables Estimates of the Effect of For-profit Attendance on Employment, Earnings, and Graduation, Including Baseline Degree Composition X Year Controls

				ssuming 150% Completion Time			
	4-year	Schools	•	Schools			
	(1)	(2)	(3)	(4)			
Enroll	0.418***	0.417***	0.164	0.144			
	(0.112)	(0.106)	(0.119)	(0.161)			
Enroll*For-profit	-0.099	-0.107	0.236	0.034			
	(0.276)	(0.279)	(0.816)	(1.171)			
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes			
Observations	18854	18854	17392	17392			
	Panel B	: Number Emplo	yed, 6 years after	enrollment			
	4-year	Schools	2-year	Schools			
	(1)	(2)	$\overline{}(3)$	(4)			
Enroll	0.858***	0.872***	0.803***	0.803***			
	(0.030)	(0.024)	(0.096)	(0.102)			
Enroll*For-profit	-0.096**	-0.110**	-0.336	-0.329			
	(0.046)	(0.048)	(0.753)	(0.809)			
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes			
Observations	9452	9452	8710	8710			
	Panel C: Total Earnings, 6 years after enrollmen						
	4-year	Schools	2-year	Schools			
	(1)	(2)	(3)	(4)			
Enroll	36024.90***	37247.40***	25876.80***	25965.80***			
	(3392.30)	(3014.90)	(6390.90)	(6899.90)			
Enroll*For-profit	-4976.50	-6182.40	-9741.60	-7630.60			
	(6280.90)	(6600.20)	(50441.00)	(55001.50)			
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes			
Observations	9452	9452	8710	8710			
	Panel D: Tot	al Students Mak	sing \$25k, 6 years	after enrollment			
	4-year	Schools	2-year	Schools			
	(1)	(2)	(3)	(4)			
Enroll	0.702***	0.719***	0.620***	0.626***			
	(0.051)	(0.045)	(0.197)	(0.221)			
Enroll*For-profit	-0.070	-0.086	0.355	0.452			
	(0.100)	(0.108)	(1.526)	(1.720)			
Time Fixed Effects	State*Year	State*Year	State*Year	State*Year			
State*FP & Year*FP	No	Yes	No	Yes			
Observations	9452	9452	8710	8710			

Authors estimates of equation (5) in the text using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,**,*** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and state-by-year fixed effects. Even columns include state-for profit and year-for profit fixed effects. All 2-year estimates include %Certificates Degrees awarded in the baseline year interacted with year dummies, while all 4-year estimates include %Bachelors Degrees awarded in the baseline year interacted with year dummies. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-15: Instrumental Variables Analysis Estimates of the Impact of For-profit Attendance on Outcomes by Percent of Bachelors Degrees Awarded

				Panel A: Nu	mbe	r of Loans			
		25-50% Ba	chelors Degrees	}		7	5% or more I	Bachelors Degre	ees
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
Enroll	0.413	0.489	0.399	0.477		0.418***	0.487***	0.432***	0.504***
	(0.683)	(0.518)	(0.688)	(0.522)		(0.138)	(0.106)	(0.142)	(0.108)
Enroll*For-profit	1.290**	1.216***	1.315**	1.238***		0.781**	0.725**	0.889***	0.825***
-	(0.603)	(0.436)	(0.610)	(0.444)		(0.368)	(0.357)	(0.295)	(0.269)
Time Fixed Effects	Year	Year	State*Year	State*Year		Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes		No	Yes	No	Yes
Observations	20642	20642	20642	20642		15418	15418	15418	15418
			Pai	nel B: Loan Ori	ginat	tion Amount	(\$)		
			chelors Degrees	1		7.	5% or more I	Bachelors Degre	es
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
Enroll	3867.20	3639.40	3797.20	3581.60		969.65	1132.20	1166.80**	1381.60**
	(3145.50)	(2417.70)	(3115.20)	(2392.50)		(913.79)	(1175.60)	(570.19)	(614.38)
Enroll*For-profit	2247.30	2469.20	2368.50	2578.70		-416.79	-550.02	1115.80	925.24
•	(2733.30)	(2035.70)	(2712.90)	(2018.60)		(5591.30)	(5239.70)	(2596.50)	(2400.20)
Time Fixed Effects	Year	Year	State*Year	State*Year		Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes		No	Yes	No	Yes
Observations	20642	20642	20642	20642		15418	15418	15418	15418
			Panel C:	: Number of Bo	rrow	ers in Defau	lt (100%)		
		25-50% Ba	chelors Degrees	}		7	5% or more I	Bachelors Degre	es
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
Enroll	0.065	0.049	0.066	0.048		0.044	0.042	0.034	0.032
	(0.195)	(0.144)	(0.187)	(0.138)		(0.058)	(0.047)	(0.035)	(0.030)
Enroll*For-profit	0.063	$0.077^{'}$	$0.057^{'}$	0.070		$0.145^{'}$	0.129	0.118	0.108
	(0.118)	(0.078)	(0.112)	(0.074)		(0.133)	(0.103)	(0.076)	(0.066)
Time Fixed Effects	Year	Year	State*Year	State*Year		Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes		No	Yes	No	Yes
Observations	13856	13856	13856	13856		9654	9654	9654	9654
			Panel D: N	Number Employ	red, 6	5 years after	enrollment		
		25-50% Ba	chelors Degrees	}		7.	5% or more I	Bachelors Degre	es
	(1)	(2)	(3)	(4)		(5)	(6)	(7)	(8)
Enroll	1.054***	1.022***	1.060***	1.024***		0.843***	0.852***	0.837***	0.846***
	(0.234)	(0.157)	(0.226)	(0.151)		(0.039)	(0.033)	(0.045)	(0.037)
Enroll*For-profit	-0.149	-0.119	-0.171	-0.138		-0.184	-0.196*	-0.203	-0.215*
_	(0.331)	(0.257)	(0.295)	(0.223)		(0.113)	(0.103)	(0.126)	(0.118)
Time Fixed Effects	Year	Year	State*Year	State*Year		Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes		No	Yes	No	Yes
Observations	8382	8382	8382	8382		6182	6182	6182	6182

This table uses public and for-profit institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated to geography (here CBSA), institution-type (public or for-profit) and level (two-year or four-year). *,***,***: significant at the 10, 5, and 1 percent level, respectively. Robust standard errors adjusted for clustering by CBSA are in parentheses. Labor demand shocks are proxied by three-year or one-year rolling Bartik shocks. Results for one-year Bartik shocks are not presented in tables, but are qualitavely similar. Two-digit industry employment data from QCEW are used for computation of Bartik shocks. The supply measure is For-profit Attendance at the corresponding level (two-year or four-year) in the specific geography at the start of the sample period in 1999-2000. All regressions include the following CBSA level variables as controls: base-year employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include geography and year or state-year fixed effects.

Table A-16: Instrumental Variables Estimates of the Effect of For-profit Attendance on Outcomes, Including Opposite-Level Supply

				Panel A: Nu	mber of Loans			
		4-year	Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.300	0.411*	0.312	0.423	0.121	0.114	0.124	0.115
	(0.360)	(0.241)	(0.399)	(0.288)	(0.123)	(0.114)	(0.191)	(0.174)
Enroll*For-profit	1.308**	1.148***	1.366**	1.230***	1.351**	1.369**	1.364	1.373
	(0.550)	(0.386)	(0.545)	(0.414)	(0.554)	(0.584)	(0.899)	(0.926)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	21666	21666	21666	21666	21666	21666	21666	21666
			Pane	el B: Loan Ori	gination Amoun	t (\$)		
		4-year	Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	403.87	1081.40	462.88	1140.20	688.35*	641.45*	944.31	862.62
	(1531.70)	(847.34)	(1707.90)	(1019.60)	(399.20)	(369.06)	(690.25)	(615.32)
Enroll*For-profit	5101.00**	4132.40***	5386.10**	4552.40***	6208.00***	6323.80***	7476.00**	7558.90**
	(2405.60)	(1565.40)	(2374.60)	(1610.00)	(1854.00)	(1952.40)	(3393.80)	(3426.60)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	21666	21666	21666	21666	21666	21666	21666	21666
	Panel C: Number of Borrowers in Default (100%)							
	4-year Schools 2-year Schools					Schools		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.088*	0.080*	0.075	0.067*	0.027*	0.026*	0.054	0.051
	(0.051)	(0.043)	(0.048)	(0.040)	(0.016)	(0.015)	(0.101)	(0.091)
Enroll*For-profit	0.069*	0.080**	0.065*	0.074**	0.195**	0.199**	0.356	0.358
	(0.040)	(0.035)	(0.034)	(0.032)	(0.096)	(0.098)	(0.606)	(0.593)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	14158	14158	14158	14158	14500	14500	14500	14500
			Panel D: N	umber Employ	ed, 6 years after	enrollment		
			Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	$\overline{}$ (5)	(6)	(7)	(8)
Enroll	0.822***	0.849***	0.820***	0.848***	0.790***	0.790***	0.827***	0.826***
	(0.055)	(0.038)	(0.062)	(0.044)	(0.185)	(0.188)	(0.083)	(0.082)
Enroll*For-profit	-0.042	-0.074	-0.043	-0.074	-0.442	-0.429	-0.195	-0.174
	(0.058)	(0.046)	(0.059)	(0.049)	(1.228)	(1.335)	(0.548)	(0.577)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	8710	8710	8710	8710	8710	8710	8710	8710
Authors estimates of ear		41 44 ¹	C C+ 1	11:	(T) 11		10 11 1	1

Authors estimates of equation (5) in the text using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,*** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Four-year estimates include controls for two-year for-profit supply fully interacted with FP and $\hat{\eta}$, while two-year estimates control for four-year for-profit supply fully interacted with FP and $\hat{\eta}$. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-17: Instrumental Variables Estimates of the Effect of For-profit Attendance on Outcomes, Replacing Total Population with College-age Population 2

				Panel A: Num	ber of Loans			
		4-year	Schools			2-year	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.443**	0.496***	0.463**	0.511***	0.104	0.105	0.117	0.119
	(0.178)	(0.130)	(0.215)	(0.172)	(0.132)	(0.128)	(0.238)	(0.228)
Enroll*For-profit	1.128***	1.052***	1.234***	1.176***	1.385*	1.374*	1.465	1.460
	(0.298)	(0.245)	(0.328)	(0.284)	(0.764)	(0.789)	(1.398)	(1.426)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23482	23482	23482	23482	21666	21666	21666	21666
				B: Loan Origi	nation Amoun			
		4-year	Schools			2-year	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	1422.20***	1837.20***	1542.20**	1927.50***	691.51	684.08	1063.30	1036.30
	(522.01)	(310.33)	(677.46)	(376.33)	(453.87)	(435.80)	(891.36)	(841.24)
Enroll*For-profit	3483.00***	2886.60***	4106.90***	3636.00***	6977.60**	7021.80**	9185.20*	9256.90*
	(1054.80)	(979.41)	(1116.40)	(898.59)	(2715.90)	(2833.40)	(5415.70)	(5548.40)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23482	23482	23482	23482	21666	21666	21666	21666
	Panel C: Number of Borrowers in Default (100%)							
			Schools				Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.110	0.097	0.105	0.091	0.020**	0.020**	0.023	0.023*
	(0.096)	(0.080)	(0.101)	(0.080)	(0.009)	(0.008)	(0.014)	(0.014)
Enroll*For-profit	0.167	0.180	0.166	0.174	0.173***	0.173***	0.195*	0.195*
	(0.108)	(0.118)	(0.124)	(0.127)	(0.063)	(0.063)	(0.103)	(0.103)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	15347	15347	15347	15347	14500	14500	14500	14500
				mber Employee	d, 6 years after			
			Schools				Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.849***	0.866***	0.848***	0.866***	0.815***	0.815***	0.846***	0.846***
	(0.027)	(0.020)	(0.030)	(0.023)	(0.130)	(0.130)	(0.068)	(0.068)
Enroll*For-profit	-0.113***	-0.134***	-0.116**	-0.136***	-0.244	-0.239	-0.004	0.001
	(0.043)	(0.045)	(0.047)	(0.050)	(1.021)	(1.025)	(0.520)	(0.519)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	9452	9452	9452	9452	8710	8710	8710	8710
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Authors estimates of equation (5) in the text using for-profit and public institutions. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,**,*** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, college-age population, and college-age population squared. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-18: Instrumental Variables Estimates of the Effect of For-profit Attendance on Outcomes, Fixing Institution Types in the Base Year

]	Panel A: Num	ber of Loans			
		4-year	Schools			2-year	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.450***	0.495***	0.461***	0.503***	-0.304	-0.288	-0.224	-0.210
	(0.164)	(0.115)	(0.176)	(0.128)	(0.647)	(0.622)	(0.507)	(0.483)
Enroll*For-profit	0.997***	0.954***	1.043***	1.003***	-0.935	-0.968	-0.478	-0.495
•	(0.239)	(0.220)	(0.255)	(0.232)	(3.760)	(3.801)	(2.958)	(2.963)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23482	23482	23482	23482	21666	21666	21666	21666
			Panel	B: Loan Origin	nation Amour	nt (\$)		
		4-year	Schools			2-year	Schools	
	(1)	(2)	(3)	(4)	$\overline{}$ (5)	(6)	(7)	(8)
Enroll	1397.60***	1834.00***	1476.30***	1883.60***	-281.01	-257.69	8.90	23.10
	(498.39)	(412.31)	(503.70)	(332.80)	(1468.90)	(1413.40)	(1028.20)	(983.46)
Enroll*For-profit	2760.00**	2351.10**	3083.20***	2694.90***	1489.60	1440.00	3137.10	3120.30
	(1185.50)	(1139.70)	(1048.60)	(956.01)	(8376.40)	(8481.90)	(5847.80)	(5884.10)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23482	23482	23482	23482	21666	21666	21666	21666
	Panel C: Number of Borrowers in Default (100%)							
		4-year	Schools			2-year	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.046*	0.042*	0.036*	0.033*	0.010	0.010	0.007	0.007
	(0.027)	(0.023)	(0.020)	(0.017)	(0.007)	(0.007)	(0.006)	(0.006)
Enroll*For-profit	0.083***	0.090***	0.077***	0.079***	0.090**	0.090**	0.072*	0.072*
	(0.024)	(0.031)	(0.021)	(0.025)	(0.043)	(0.043)	(0.040)	(0.040)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	14997	14997	14997	14997	14500	14500	14500	14500
			Panel D: Nun	nber Employed	l, 6 years afte	r enrollment		
		4-year	Schools			2-year	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.867***	0.882***	0.869***	0.884***	0.735***	0.735***	0.780***	0.780***
	(0.029)	(0.020)	(0.030)	(0.022)	(0.259)	(0.259)	(0.190)	(0.190)
Enroll*For-profit	-0.101***	-0.118***	-0.097***	-0.113***	-0.806	-0.804	-0.477	-0.474
-	(0.032)	(0.033)	(0.035)	(0.038)	(1.889)	(1.888)	(1.399)	(1.400)
Time Fixed Effects	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	9452	9452	9452	9452	8710	8710	8710	8710

Authors estimates of equation (5) in the text using for-profit and public institutions, classifying the 5% of schools that switch from two-year to four-year during the period of our analysis as two-year schools. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,***,*** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-19: Instrumental Variables Estimates of the Impact of For-profit Attendance on Outcomes, Excluding Online Institutions

				Panel A: N	umber of Loans			
		4-yea	r Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.467***	0.518***	0.511***	0.568***	0.064	0.067	0.012	0.019
	(0.150)	(0.120)	(0.172)	(0.137)	(0.127)	(0.122)	(0.231)	(0.218)
Enroll*For-profit	1.482***	1.358***	1.658***	1.565***	1.147	1.130	0.841	0.824
	(0.452)	(0.402)	(0.452)	(0.409)	(0.724)	(0.744)	(1.351)	(1.367)
Time Fixed Effect Type	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23482	23482	23482	23482	21666	21666	21666	21666
			Par	el B: Loan Or	igination Amour			
			r Schools			2-year S		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	1243.80	1560.50**	1524.00*	1870.70***	509.94	508.40	593.62	587.79
	(774.05)	(679.42)	(780.48)	(612.70)	(377.97)	(363.75)	(600.59)	(571.58)
Enroll*For-profit	3885.10	3127.50	4985.90**	4416.60**	5898.20***	5905.80***	6396.00*	6410.40*
•	(2609.30)	(2447.30)	(2272.00)	(2062.30)	(2168.60)	(2243.30)	(3546.70)	(3623.20)
Time Fixed Effect Type	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	23482	23482	23482	23482	21666	21666	21666	21666
			Panel C:	Number of Bo	orrowers in Defa	ult (100%)		
		4-yea	r Schools			2-year S	Schools	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.034*	0.032*	0.032	0.030	0.026	0.026	0.043	0.043
	(0.019)	(0.019)	(0.022)	(0.020)	(0.016)	(0.016)	(0.064)	(0.063)
Enroll*For-profit	0.102**	0.104**	0.098*	0.098*	0.214*	0.214*	0.336	0.336
	(0.050)	(0.051)	(0.055)	(0.055)	(0.116)	(0.117)	(0.462)	(0.463)
Time Fixed Effect Type	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	15347	15347	15347	15347	14500	14500	14500	14500
				lumber Emplo	yed, 6 years after			
			r Schools			2-year S		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Enroll	0.820***	0.835***	0.816***	0.832***	0.605	0.603	0.800***	0.800***
	(0.066)	(0.058)	(0.079)	(0.069)	(1.099)	(1.120)	(0.099)	(0.099)
Enroll*For-profit	-0.247	-0.270	-0.258	-0.278	-1.872	-1.897	-0.359	-0.356
	(0.152)	(0.169)	(0.186)	(0.198)	(8.442)	(8.664)	(0.778)	(0.783)
Time Fixed Effect Type	Year	Year	State*Year	State*Year	Year	Year	State*Year	State*Year
State*FP & Year*FP	No	Yes	No	Yes	No	Yes	No	Yes
Observations	9452	9452	9452	9452	8710	8710	8710	8710

Authors estimates of equation (5) in the text using for-profit and public institutions, excluding institutions classified as online at the start of the sample period in 1999-2000. Online institutions as defined in the 2011-2014 IPEDS are excluded from the estimating sample. The enrollment measure is 12-month total enrollment. Enrollment and outcomes are aggregated by CBSA, institution-type (public or for-profit) and level (two-year or four-year). Robust standard errors adjusted for clustering by CBSA are in parentheses: *,**,**** indicate significance at the 10, 5, and 1 percent level, respectively. All regressions include the following CBSA-year level variables as controls: base-year (t-3) employment, gender composition (%female), racial composition (%black, %Hispanic, %American India, %Asian, %Two or more races), age composition (%20-29, %30-39, %40 or over), %poverty, and total population. All regressions also include CBSA and year fixed effects. Even columns include state-for profit and year-for profit fixed effects, while columns (3)-(4) and (7)-(8) include state-by-year fixed effects. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-20: Effects of Labor Demand Changes and For-Profit Supply on Entry/Exit of Postsecondary Institutions, by Sector and Period

Panel A: 2000-2006		4 year	schools			2 year sc	schools	
	For	For-Profit	Д	Public	For-	For-Profit	Pl	Public
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Predicted Labor Demand Change $(\hat{\eta})$	-0.006	0.001	0.003	0.001	-0.011	0.016	-0.003	-0.011*
	(0.005)	(0.007)	(0.002)	(0.003)	(0.000)	(0.016)	(0.005)	(0.006)
$(2000 \text{ Supply})^*(\hat{\eta})$	0.003	0.002	-0.000	-0.000	0.000	0.000	-0.000	-0.001*
	(0.003)	(0.003)	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)
Fixed Effects	Year	State*Year	Year	State*Year	Year	State*Year	Year	State*Year
Observations	5522	5522	5522	5522	5086	5086	5086	5086
R-squared	0.215	0.271	0.025	0.101	0.066	0.143	0.041	0.259
Mean of Dep. Var.	0.438	0.438	0.746	0.746	2.899	2.899	1.751	1.751
Panel B: 2008-2014		4 year	schools			2 year sc	schools	
	Ι΄ '	For-Profit	Д	Public	For-	For-Profit	Pl	Public
	(1)	(2)	(3)	(4)	(5)	(9)	(7)	(8)
Predicted Labor Demand Change $(\hat{\eta})$	0.003	0.002	-0.000	0.003	0.022***	0.014	0.005	0.007*
	(0.004)	(0.005)	(0.002)	(0.002)	(0.007)	(0.010)	(0.003)	(0.004)
$(2000 \text{ Supply})^*(\hat{\eta})$	-0.002	-0.002	-0.000	0.000	-0.001***	-0.001***	0.000	0.000
	(0.001)	(0.001)	(0.001)	(0.001)	(0.000)	(0.000)	(0.000)	(0.000)
Fixed Effects	Year	State*Year	Year	State*Year	Year	State*Year	Year	State*Year
Observations	5477	5477	5477	5477	5065	5065	5065	5065
R-squared	0.502	0.537	0.048	0.197	0.344	0.390	0.050	0.203
Mean of Dep. Var.	0.882	0.882	0.807	0.807	3.456	3.456	1.609	1.609

Authors estimates as described in the text using for-profit or public institutions (as indicated). Standard errors clustered by CBSA are in parentheses: *,**,*** indicates significance at the 10, 5, and 1 percent level, respectively. All regressions include CBSA-year controls as described in the text as well as CBSA and year fixed effects. State-year fixed effects are included in even columns. Two year estimates include two-year and less than two year institutions and exclude the 65 CBSAs that only have a for-profit college in the base year.

Table A-21: Data Ranges and Cohorts for Outcomes

Outcome Variables	Data Ranges	Cohorts
	(1)	(2)
Number of Recipients: Direct Subsidized loans	2000-2014	2000-2014
Number of Recipients: Direct Unsubsidized loans	2000-2014	2000-2014
Number of Recipients: FFEL Subsidized loans	2000-2014	2000-2014
Number of Recipients: FFEL Unsubsidized loans	2000-2014	2000-2014
Number of Federal Loans	2000-2014	2000-2014
Loan Origination Amounts	2000-2014	2000-2014
Number of Borrowers in Default, assuming 100% completion time (2 year schools)	2002-2011	2000-2009
Number of Borrowers in Default, assuming 100% completion time (4 year schools)	2004-2011	2000-2007
Number of Borrowers in Default, assuming 150% completion time (2 year schools)	2003-2011	2000-2008
Number of Borrowers in Default, assuming 150% completion time (4 year schools)	2006-2011	2000-2005
Number Employed, 6 years after enrollment	2005-2011	2001-2006
Total Earnings, 6 years after enrollment	2005-2011	2001-2006
Number of Students Making \$25k, 6 years after enrollment	2005-2011	2001-2006
Number of Students Graduated, assuming 150 % completion time (2 year schools)	2002-2013	2000-2011
Number of Students Graduated, assuming 150 % completion time (4 year schools)	2005-2013	2000-2008

Years are reported in terms of the spring semester of academic years. Data for number of borrowers in default come in fiscal years.