

Nonresident Students at Public Research Universities: Trends and Research

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Nonresident students at public research universities

Goal of presentation:

- Provide context for policy discussion by showing national trends and reviewing empirical research

Overview:

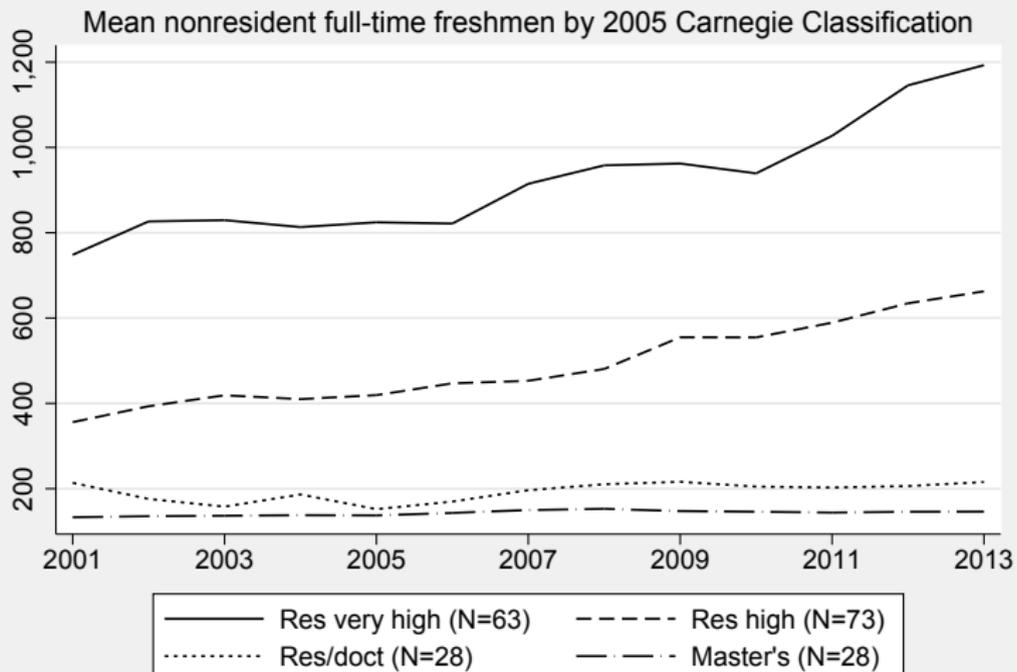
- Policy concerns
- Compare UC to national revenue and student composition trends
- Compare UC to national nonresident enrollment trends
- Review of findings from empirical research
- What can we say about policy concerns

Potential policy concerns about nonresident students at the University of California

- Does nonresident enrollment growth at UC campuses “crowd out” opportunities for in-state students?
- Does nonresident enrollment growth affect the socioeconomic and racial composition of UC campuses?
- How do campuses spend/allocate nonresident tuition revenue?
 - Need-based financial aid; merit aid financial aid; student services
- What happens to low-income CA residents denied access to UC?
- Do CA residents who leave CA for college come back after college?
- Do nonresident students who go to school in CA stay after college?

Compare UC to national revenue and student composition trends

Only research universities have substantial nonresident enrollment



Source: Author calculations based on IPEDS data

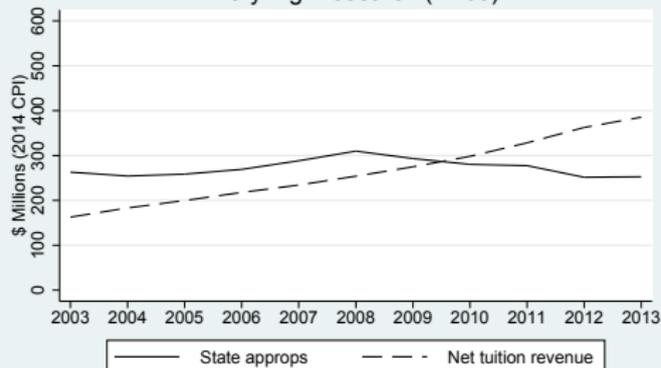
Finding a comparison group: Carnegie Classification and US News rank of UC campuses

	Carnegie Classification		US News rank	
	2005	2010	2005	2015
Berkeley	res-very-hi	res-very-hi	21	20
UCLA	res-very-hi	res-very-hi	25	23
San Diego	res-very-hi	res-very-hi	35	37
Davis	res-very-hi	res-very-hi	42	38
Irvine	res-very-hi	res-very-hi	43	42
Santa Barbara	res-very-hi	res-very-hi	45	40
Santa Cruz	res-very-hi	res-very-hi	74	85
Riverside	res-very-hi	res-very-hi	81	113
Merced				

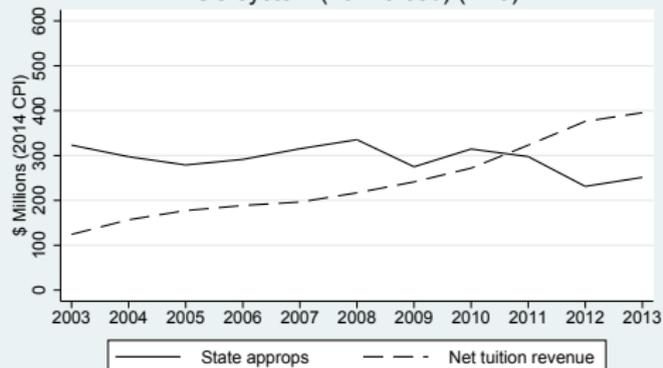
Source: Author calculations based on IPEDS data

Mean revenue from state appropriations and net tuition, 2002-03 to 2012-13

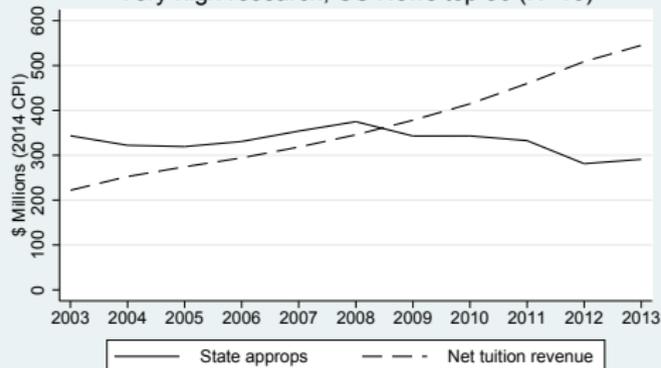
Very-high research (N=63)



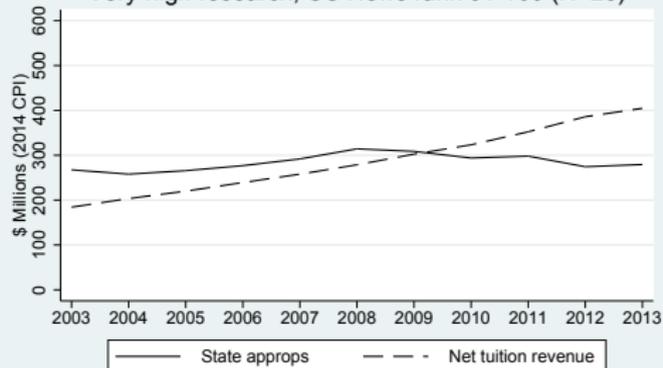
UC system (no Merced) (N=8)



Very-high research, US News top 50 (N=16)



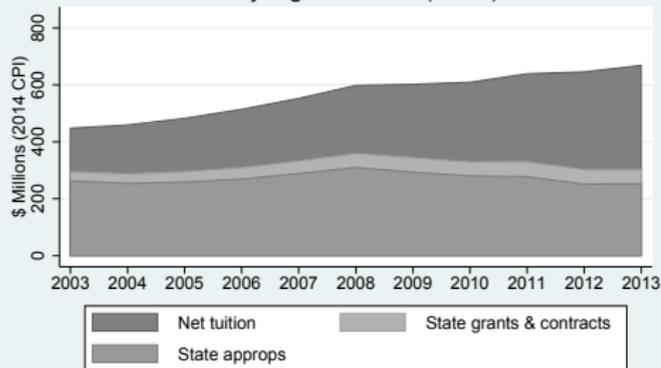
Very-high research, US News rank 51-100 (N=25)



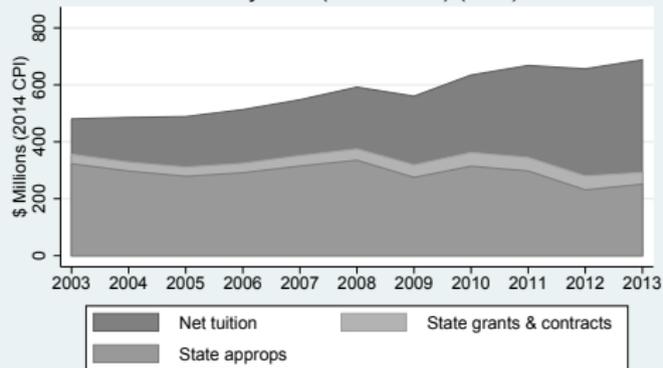
Source: Author calculations based on IPEDS data
Note: Net tuition revenue excludes discounts and allowances

Mean revenue from state sources and net tuition, 2002-03 to 2012-13

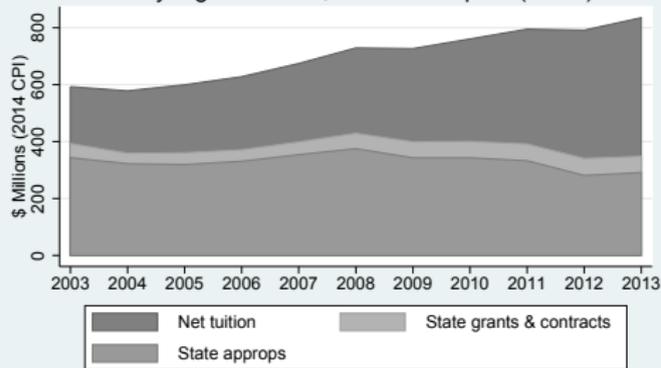
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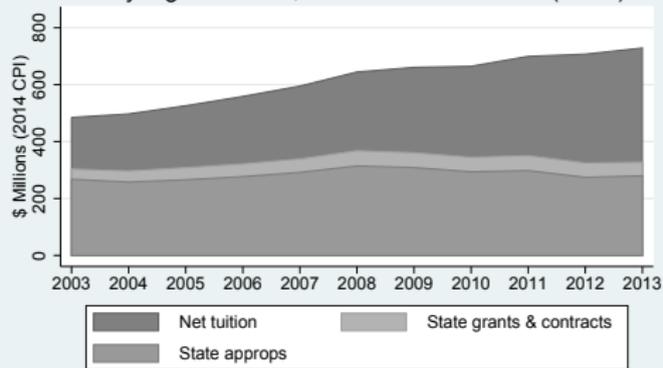
UC system (no Merced) (N=8)



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Very-high research, US News rank 51-100 (N=25)



Source: Author calculations based on IPEDS data

State grants & contracts includes operating (e.g., research) & non-operating (e.g., student grants)

Revenue from state sources and net tuition at UC campuses (\$ millions; 2014 CPI)

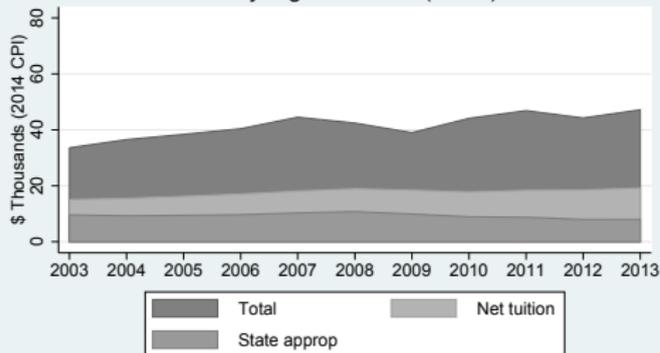
Campus	State approps		State g&c		Net tuition	
	2002-03	2012-13	2002-03	2012-13	2002-03	2012-13
Berkeley	497	298	68	86	197	621
UCLA	625	434	53	51	203	602
San Diego	301	267	24	43	116	402
Davis	442	336	75	111	133	421
Irvine	243	233	15	19	114	389
Santa Barbara	202	136	10	6	89	300
Santa Cruz	123	134	8	4	69	191
Riverside	153	173	12	10	72	239
Merced		93		1		51

Source: Author calculations based on IPEDS data

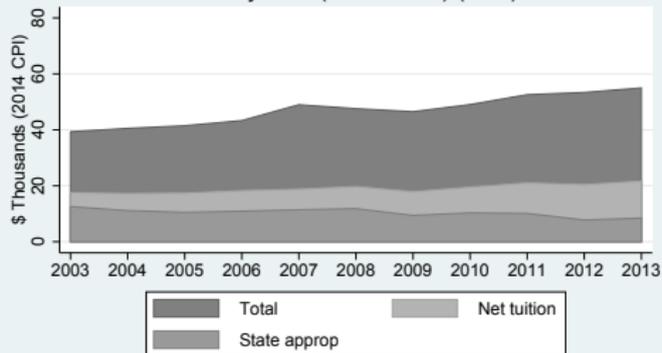
Note: State grants & contracts includes operating (e.g., research) and non-operating (e.g., student grants)

Mean revenue per FTE student, 2002-03 to 2012-13

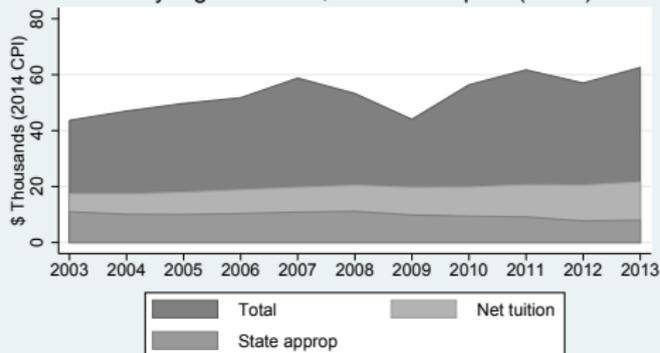
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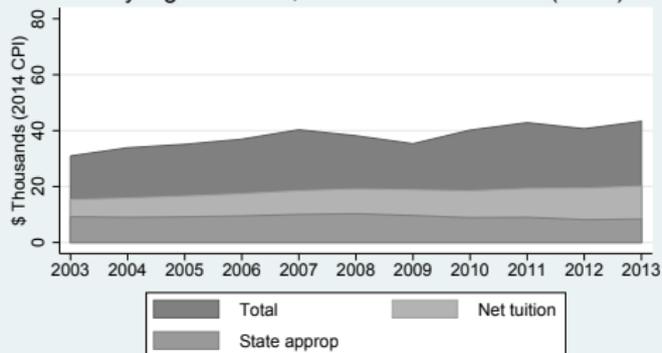
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Very-high research, US News top 50 (N=16)



Very-high research, US News rank 51-100 (N=25)



Source: Author calculations based on IPEDS data

Note: FTE student enrollment based on total credit hours

Note: Total revenue is operating and non-operating revenue, excluding hospitals

Revenue per FTE student at UC campuses (\$ thousands, 2014 CPI)

Campus	State approp		Net tuition		Total	
	2002-03	2012-13	2002-03	2012-13	2002-03	2012-13
Berkeley	15,179	7,801	6,020	16,228	41,894	55,410
UCLA	17,741	10,555	5,764	14,666	64,140	90,468
San Diego	12,896	8,878	4,977	13,389	54,471	78,410
Davis	16,595	10,432	5,012	13,093	46,746	62,571
Irvine	10,104	7,987	4,733	13,299	34,512	49,641
Santa Barbara	9,404	5,955	4,146	13,144	24,684	37,286
Santa Cruz	8,671	7,566	4,885	10,733	23,969	34,046
Riverside	9,869	8,377	4,649	11,576	24,189	32,115
Merced		15,551		8,579		34,163

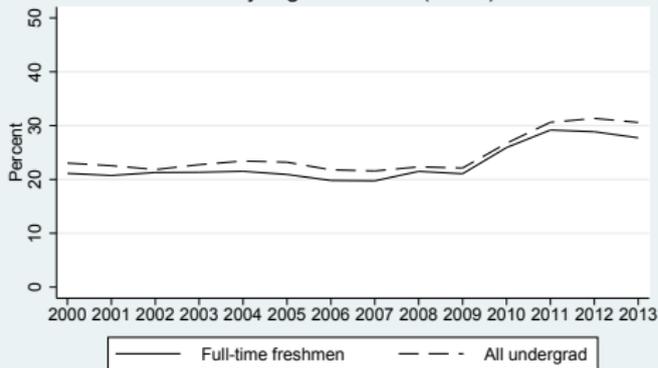
Source: Author calculations based on IPEDS data

Note: FTE student enrollment based on total credit hours

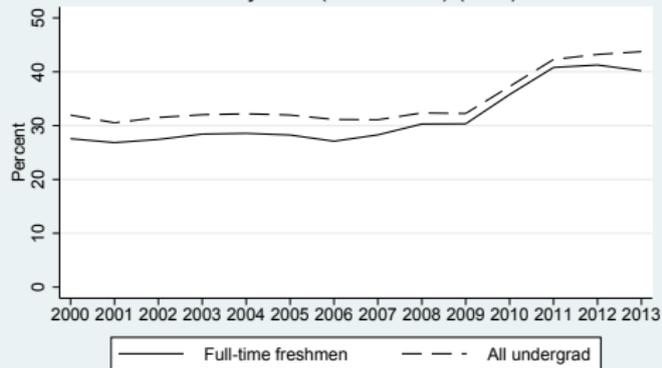
Note: Total revenue is operating and non-operating revenue, excluding hospitals

Mean percent of students receiving Pell Grants, 1999-00 to 2012-13

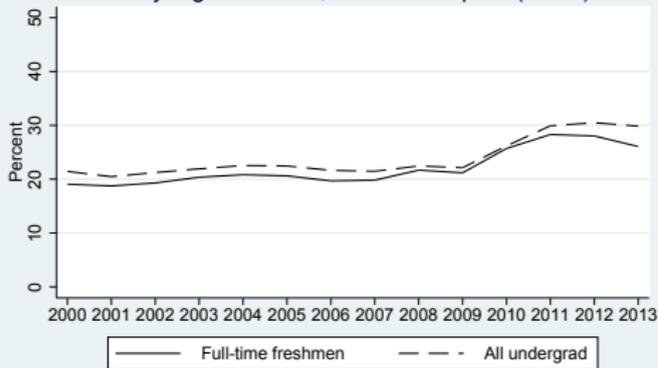
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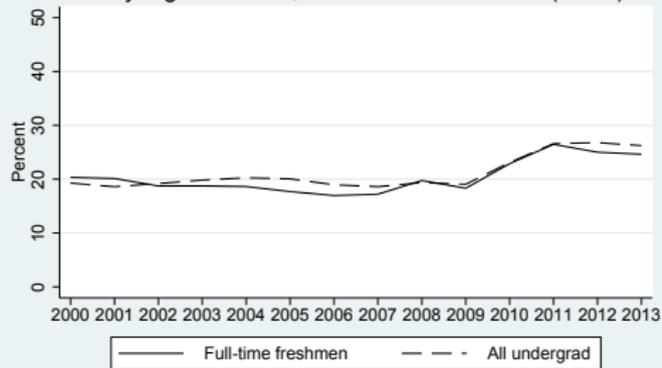
UC system (no Merced) (N=8)



Very-high research, US News top 50 (N=16)



Very-high research, US News rank 51-100 (N=25)



Source: Author calculations based on IPEDS data and Office of Federal Student Aid data
Note: For full-time freshman, use number receiving federal grants as proxy for Pell

Percent of students receiving Pell Grants at UC campuses

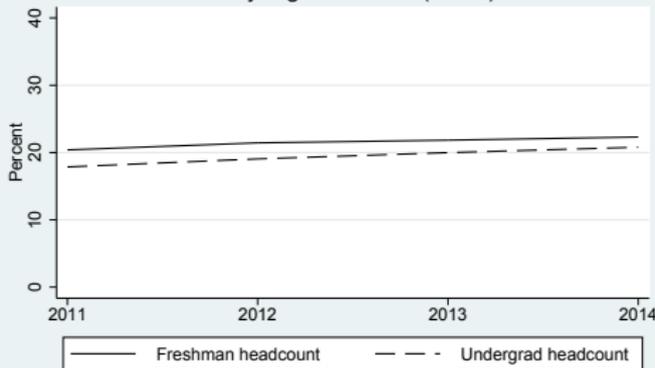
Campus	Full-time freshmen		All undergrad	
	1999-00	2012-13	1999-00	2012-13
Berkeley	28.8	27.1	31.0	35.9
UCLA	30.8	31.2	35.0	38.9
San Diego	26.1	30.2	28.4	43.7
Davis	21.4	36.8	29.1	43.8
Irvine	32.1	48.3	35.2	44.0
Santa Barbara	22.5	40.9	24.6	38.8
Santa Cruz	21.4	51.2	28.2	45.6
Riverside	37.4	55.8	44.4	59.4
Merced		62.9		61.0

Source: Author calculations based on data from IPEDS and Office of Federal Student Aid

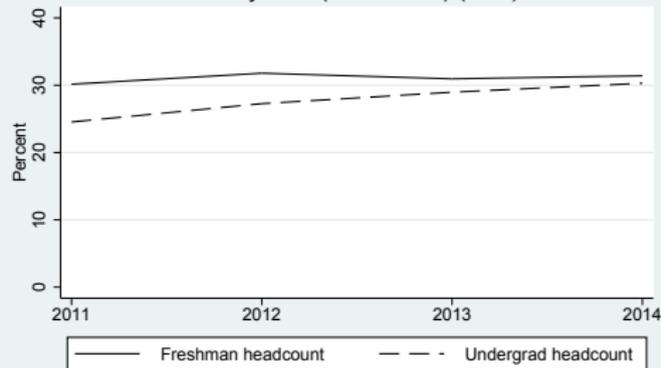
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Mean Percent underrepresented minority (URM) students, 2010-11 to 2013-14

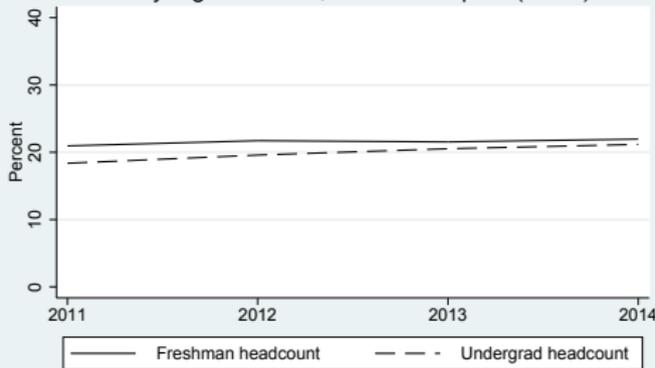
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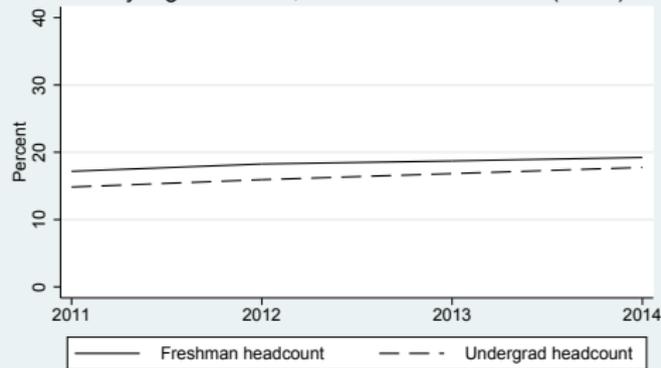
UC system (no Merced) (N=8)



Very-high research, US News top 50 (N=16)



Very-high research, US News rank 51-100 (N=25)



Source: Author calculations based on IPEDS data

Note: URM defined as Black, Hispanic, Native American/Hawaiian, Pacific Islander, Mixed race

Percent underrepresented minority (URM) students at UC campuses

Campus	Freshman headcount		Undergrad headcount	
	2010-11	2013-14	2010-11	2013-14
Berkeley	17.8	18.0	17.4	20.4
UCLA	26.8	28.8	22.2	26.2
San Diego	22.8	22.1	17.9	22.0
Davis	26.9	25.9	20.1	24.7
Irvine	26.1	29.7	20.1	27.8
Santa Barbara	37.9	38.2	30.2	36.6
Santa Cruz	36.2	44.9	27.5	40.1
Riverside	46.7	43.6	40.9	44.7
Merced	52.1	60.4	45.2	54.6

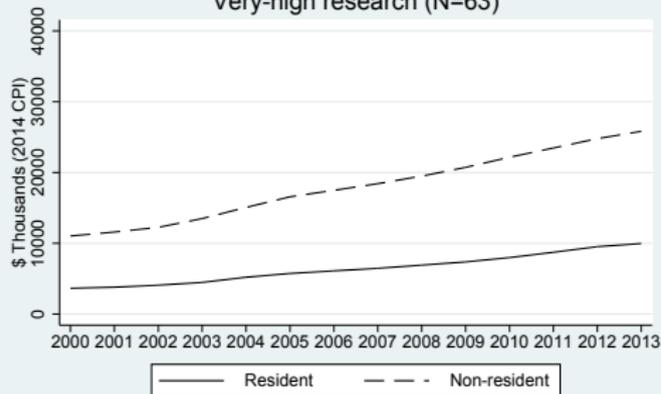
Source: Author calculations based on IPEDS data

Note: URM defined as Black, Hispanic, Native American, Native Hawaiian, Pacific Islander, Mixed race

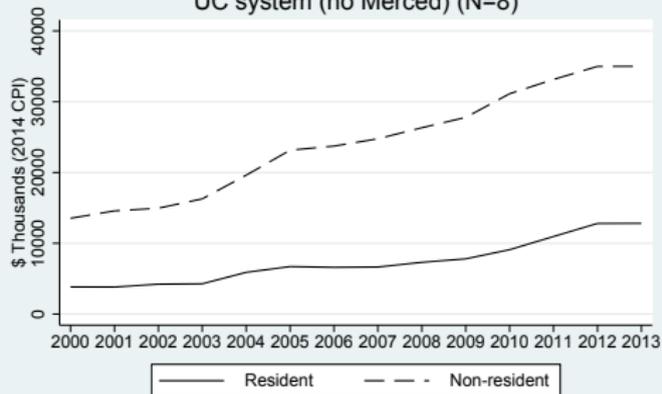
Compare UC to national nonresident enrollment trends

Mean price of tuition and mandatory fees, 1999-00 to 2012-13

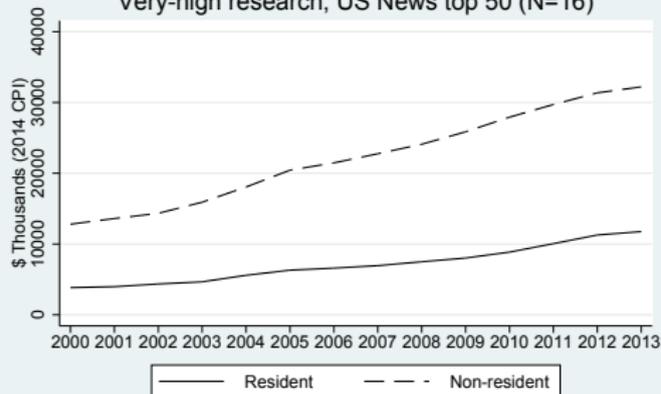
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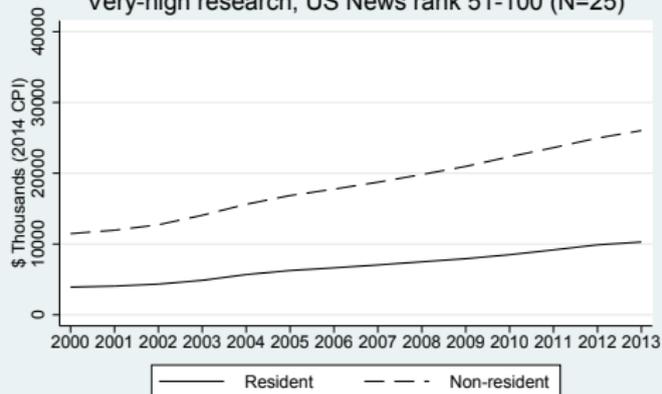
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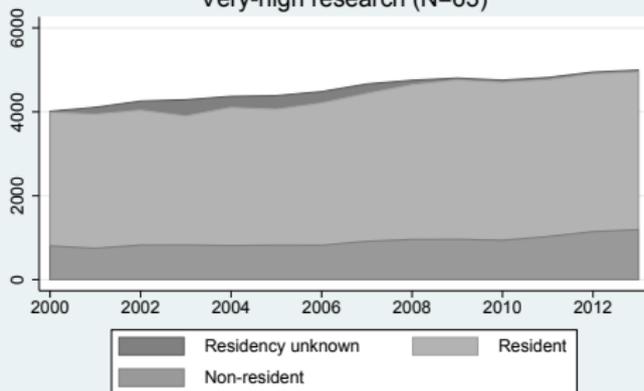
Price of tuition and mandatory fees at UC campuses (2014 CPI)

Campus	Resident		Non-resident	
	1999-00	2012-13	1999-00	2012-13
Berkeley	3,924	12,486	13,791	34,673
UCLA	3,586	12,309	13,454	34,497
San Diego	3,906	12,818	13,006	35,006
Davis	3,912	13,458	13,779	35,646
Irvine	3,753	12,726	13,620	34,914
Santa Barbara	3,728	13,259	13,595	35,446
Santa Cruz	4,107	13,011	13,974	35,199
Riverside	3,818	12,569	13,102	34,757
Merced		12,676		34,864

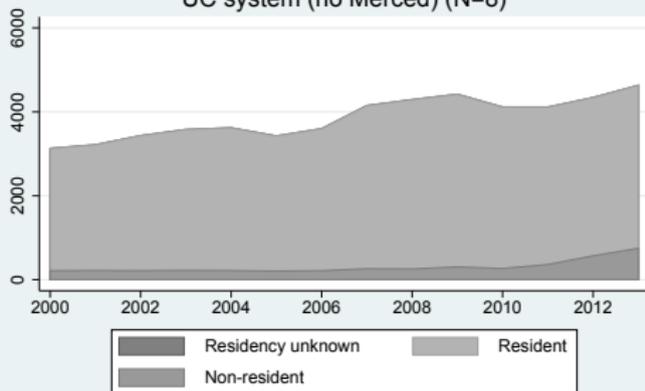
Source: Author calculations based on IPEDS data

Mean full-time freshman enrollment by tuition residency, 1999-00 to 2012-13

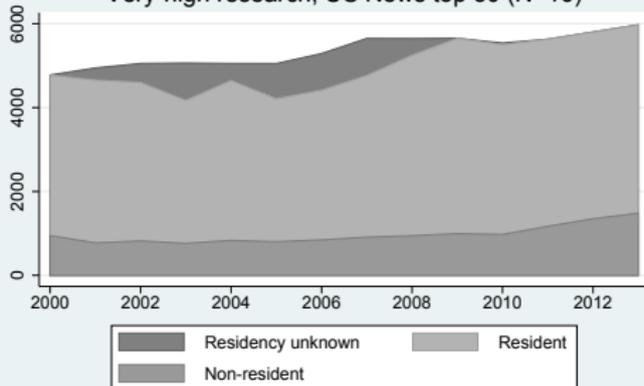
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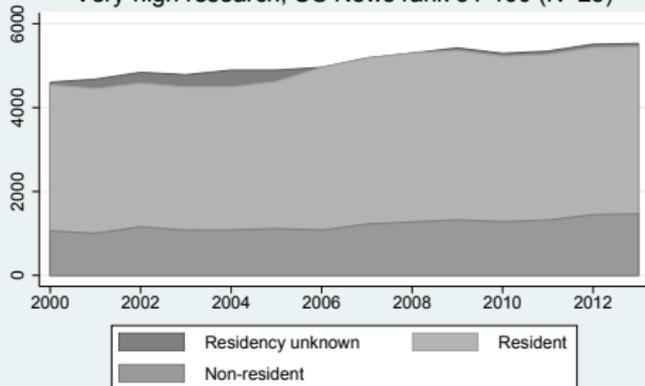
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Source: Author calculations based on IPEDS data

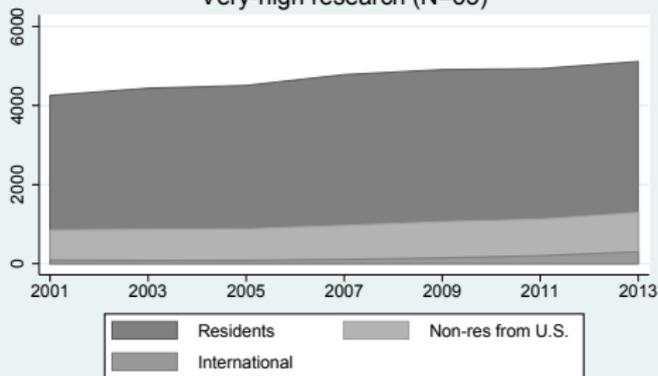
Mean full-time freshman enrollment by tuition residency at UC campuses

Campus	Resident		Non-resident		Pct non-resident	
	1999-00	2012-13	1999-00	2012-13	1999-00	2012-13
Berkeley	3,066	2,907	468	1,220	13	30
UCLA	3,712	4,010	315	1,598	8	28
San Diego	2,951	3,498	139	1,072	4	23
Davis	2,584	4,742	119	430	4	8
Irvine	3,490	4,312	184	755	5	15
Santa Barbara	3,484	4,193	258	529	7	11
Santa Cruz	2,126	3,652	181	165	8	4
Riverside	1,925	3,783	45	218	2	5
Merced		1,434		58		4

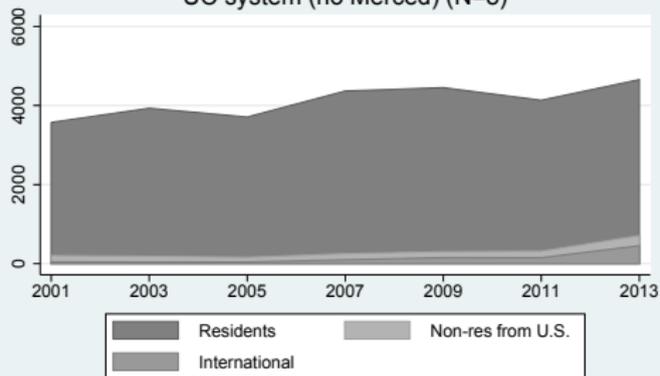
Source: Author calculations based on IPEDS data

Mean freshman headcount by place of origin (odd years), 2000-01 to 2012-13

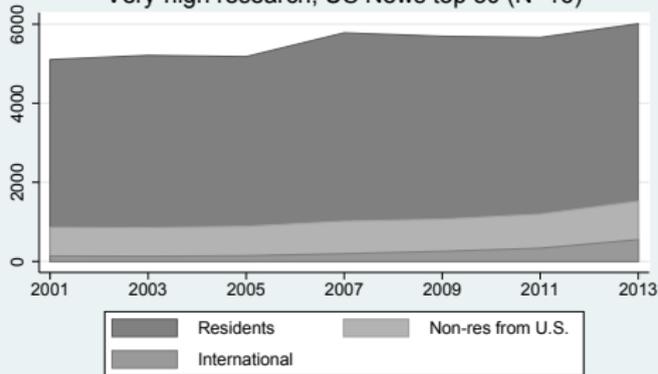
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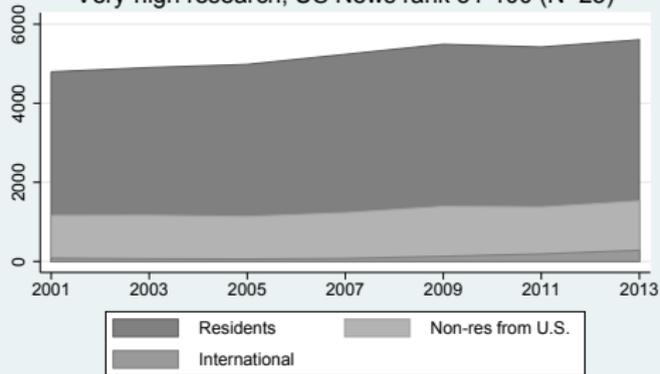
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Very-high research, US News rank 51-100 (N=25)



Source: Author calculations based on IPEDS data

Note: Reporting freshman migration mandatory in odd academic years (e.g., 2012-13)

Mean freshman headcount by place of origin (odd years) at UC campuses

Campus	Residents		Non-res from U.S.		International	
	2000-01	2012-13	2000-01	2012-13	2000-01	2012-13
Berkeley	3,355	2,971	317	573	76	618
UCLA	3,970	4,028	186	540	47	1,052
San Diego	3,017	3,536	91	353	16	686
Davis	4,174	4,813	133	84	31	311
Irvine	3,461	4,356	99	112	143	609
Santa Barbara	3,190	4,227	210	278	25	236
Santa Cruz	2,687	3,726	212	80	16	21
Riverside	3,079	3,894	39	42	12	98
Merced		1,492		0		0

Source: Author calculations based on IPEDS data

Note: Reporting freshman migration mandatory in odd academic years (e.g., 2012-13)

Mean characteristics of 2011-12 freshmen at public research-extensive universities

	All public research ^a		In US News top 100 ^b		Not in US News top 100 ^c	
	Resident	Nonresident	Resident	Nonresident	Resident	Nonresident
Tuition						
Sticker price ^d	8,775	27,539	11,054	30,872	6,813	18,488
Institutional financial aid ^d	2,160	6,843	3,073	7,568	1,374	4,874
Net tuition revenue ^d	6,616	20,696	7,982	23,303	5,440	13,614
SAT score ^e	1,074	1,150	1,131	1,176	1,024	1,079
Family income ^d	90,886	115,772	101,435	119,061	81,382	106,423
Percent Pell	37.6%	14.2%	33.1%	11.1%	41.4%	22.4%
Parental education						
No BA degree	43.5%	23.9%	33.8%	20.5%	51.7%	33.2%
BA degree	27.9%	29.1%	31.0%	29.2%	25.3%	28.7%
Graduate degree	28.6%	47.0%	35.2%	50.2%	23.0%	38.1%
Race						
White	61.4%	65.4%	67.3%	64.3%	56.4%	68.5%
Black	13.0%	5.3%	7.3%	4.3%	17.9%	8.0%
Hispanic	13.3%	8.7%	12.4%	8.9%	14.0%	8.3%
Asian	7.9%	15.3%	8.9%	17.9%	7.1%	8.2%
Native	0.7%	1.0%	0.8%	0.9%	0.6%	1.3%
Other	3.7%	4.3%	3.3%	3.7%	4.0%	5.9%
Weighted sample size	253,631	129,867	117,332	94,922	136,299	34,945
Unweighted sample size	1,170	730	600	580	570	150

Notes: Authors' calculations based on 2011-12 National Postsecondary Student Aid Survey (NPSAS); ^a public research-extensive universities as defined by 2000 Carnegie Classification; ^b public research-extensive universities categorized in tiers 1 & 2 of USNWR 2000 National University Rankings; ^c public research-extensive universities categorized in tiers 3 & 4 of USNWR Rankings; ^d 2012 CPI; ^e ACT scores converted to SAT scale

Review of empirical research

Review of empirical research on nonresident students at public research universities

- Universities increase nonresident enrollment following declines in state appropriations (Jaquette & Curs, 2015)
- Admissions preferences for resident students (Groen & White, 2004), but this erodes as state approps decline (Cummings, 2015)
- Growth in % nonresident associated with declining % low-income and underrepresented minority (Jaquette, Curs, & Posselt, forthcoming)
 - Especially at: high-prestige schools; states with affirmative action bans
- Modest positive relationship between attending college in a state and working in that state (Groen, 2004)
 - Results are dated; not likely to hold for CA
- State approps and state merit aid reduce out-migration, but not state need-based aid (Zhang & Ness, 2010; Toutkoushian & Hillman, 2012)

Policy concerns about nonresident students at the University of California

- Does nonresident enrollment growth at UC campuses “crowd out” opportunities for in-state students?
- Does nonresident enrollment growth change the socioeconomic and racial composition of UC campuses?
- How do campuses spend nonresident tuition revenue?
 - Financial aid; student services; “luxury” services/facilities
- What happens to low-income CA residents denied access to UC?
- Do CA residents who leave CA for college come back after college?
- Do nonresident students who go to school in CA stay after college?

Future research/data to inform policy debate

- Does nonresident enrollment growth “crowd-out” resident enrollment?
 - Research in progress
- Where do low-income CA residents denied access to UC enroll for college?
 - Data: ACT and National Clearinghouse
- What are the characteristics (academic and socioeconomic) of CA residents who attend college out of state?
 - Data: ACT and National Clearinghouse
- Do CA students who attend college out of state return to CA after college?
- Do nonresident students who go to school in CA stay after college?

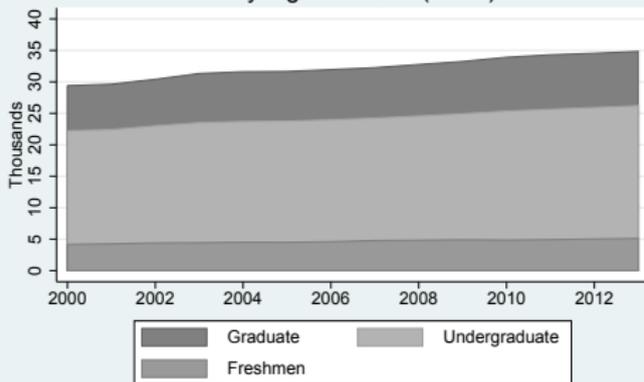
References

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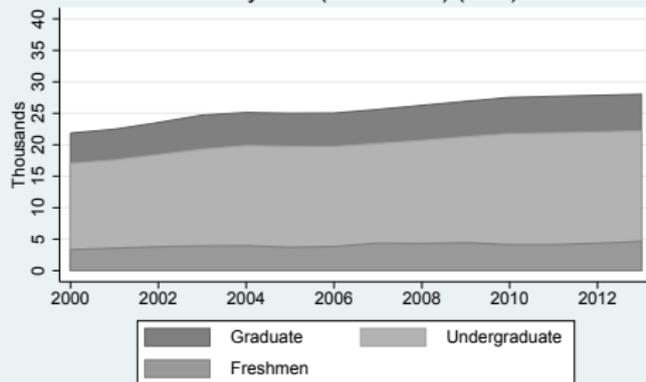
Appendix/extra slides

Mean fall enrollment headcount, 1999-00 to 2012-13

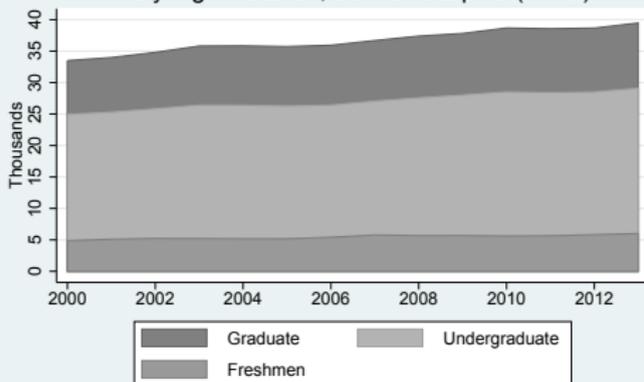
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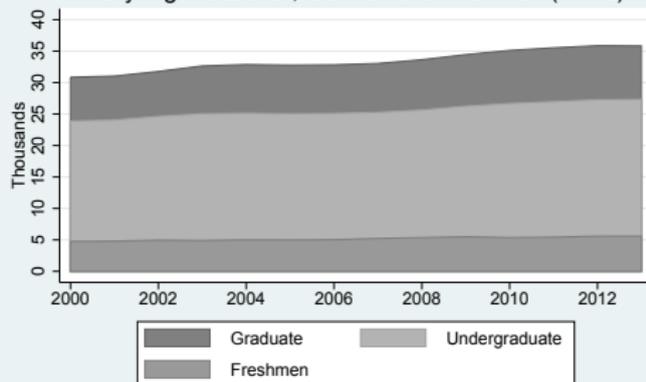
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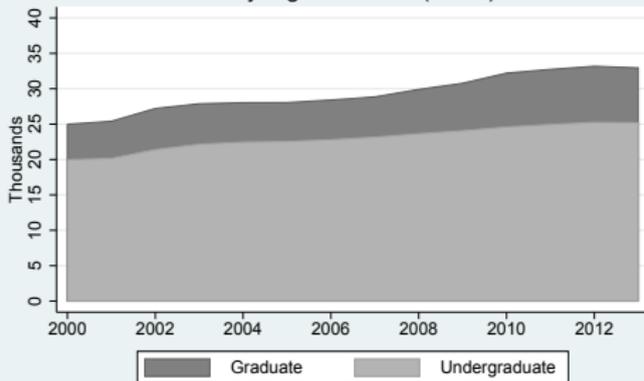
Fall enrollment headcount at UC campuses

Campus	Freshmen		Undergraduate		Graduate	
	1999-00	2012-13	1999-00	2012-13	1999-00	2012-13
Berkeley	3,609	4,162	22,593	25,774	8,754	10,119
UCLA	3,751	5,620	24,668	27,941	11,683	12,004
San Diego	3,091	4,575	16,230	22,676	3,664	5,618
Davis	3,819	5,208	19,517	25,666	5,575	6,688
Irvine	3,652	5,077	15,361	22,216	3,916	5,263
Santa Barbara	3,756	4,741	17,699	18,977	2,357	2,950
Santa Cruz	2,365	3,827	10,269	15,978	1,033	1,426
Riverside	2,666	4,034	10,120	18,539	1,480	2,408
Merced		1,492		5,431		329

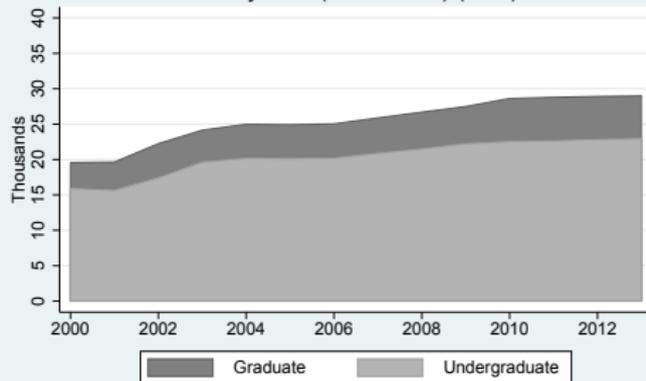
Source: Author calculations based on IPEDS data

Mean FTE enrollment based on credit hours, 1999-00 to 2012-13

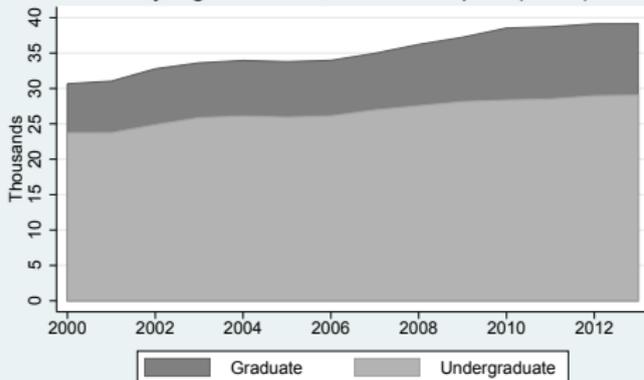
Very-high research (N=63)



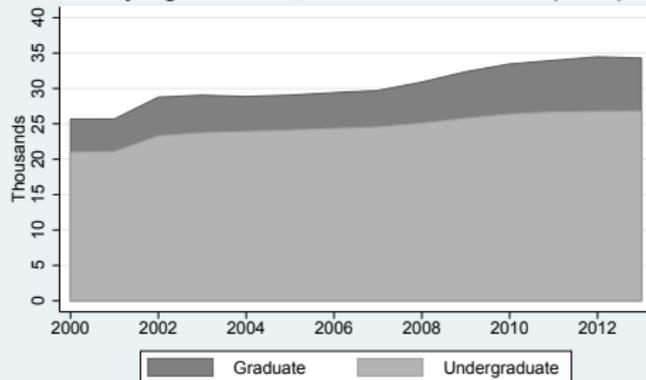
UC system (no Merced) (N=8)



Very-high research, US News top 50 (N=16)



Very-high research, US News rank 51-100 (N=25)



Source: Author calculations based on IPEDS data

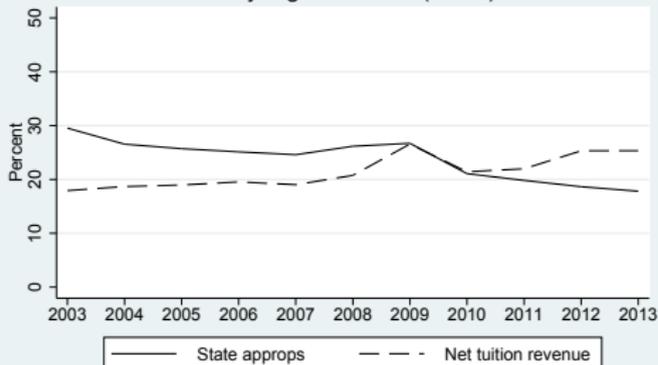
Full-time equivalent enrollment based on credit hours at UC campuses

Campus	Undergraduate		Graduate		Total	
	1999-00	2012-13	1999-00	2012-13	1999-00	2012-13
Berkeley	21,615	27,568	7,100	10,672	28,715	38,240
UCLA	22,134	28,634	8,137	12,437	30,271	41,071
San Diego	15,424	23,961	2,828	6,066	18,252	30,027
Davis	17,443	25,844	3,343	6,328	20,786	32,172
Irvine	14,804	23,595	3,078	5,637	17,882	29,232
Santa Barbara	16,729	19,593	2,437	3,213	19,166	22,806
Santa Cruz	9,843	16,216	971	1,535	10,814	17,751
Riverside	9,207	18,145	1,479	2,502	10,687	20,647
Merced		5,651		330		5,981

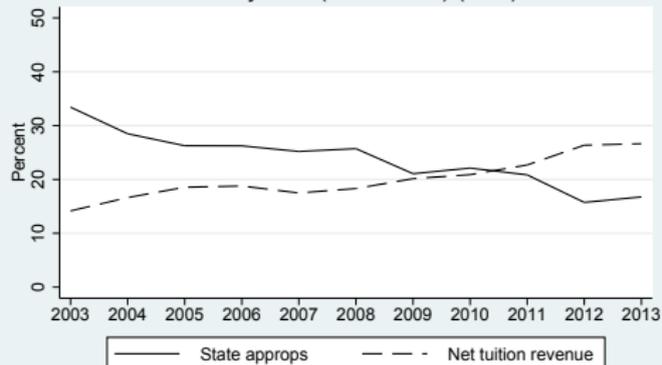
Source: Author calculations based on IPEDS data

Mean state approp and net tuition as pct of total revenue, 2002-03 to 2012-13

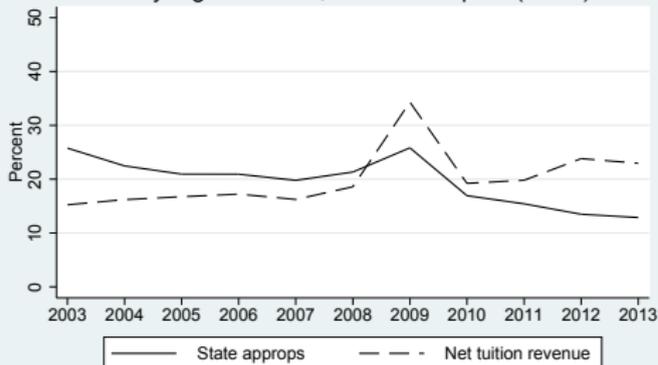
Very-high research (N=63)



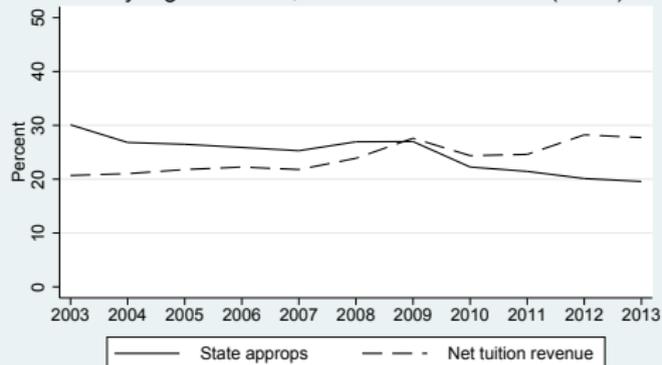
UC system (no Merced) (N=8)



Very-high research, US News top 50 (N=16)



Very-high research, US News rank 51-100 (N=25)



Source: Author calculations based on IPEDS data

Note: Total revenue is operating and non-operating revenue, excluding hospitals

Percent of total revenue from net tuition and state appropriations at UC campuses

Campus	State approps		Net tuition revenue	
	2002-03	2012-13	2002-03	2012-13
Berkeley	36.2	14.1	14.4	29.3
UCLA	27.7	11.7	9.0	16.2
San Diego	23.7	11.3	9.1	17.1
Davis	35.5	16.7	10.7	20.9
Irvine	29.3	16.1	13.7	26.8
Santa Barbara	38.1	16.0	16.8	35.3
Santa Cruz	36.2	22.2	20.4	31.5
Riverside	40.8	26.1	19.2	36.0
Merced		45.5		25.1

Source: Author calculations based on IPEDS data

Note: Total revenue is operating and non-operating revenue, excluding hospitals