

Contracts & Grants Q213 Award Report

Year-to-date Federal Funding Still Lagging

Summary

UC's award funding for the second quarter of FY 2012-2013 totaled about \$1.02 billion, exceeding the amount reported for Q2 a year ago by about \$65 million, or 7%. For the year to date, though, the award total of \$2.79 billion is still nearly 7% below last year's amount. This difference is due to the very substantial drop in federal funding experienced during the first quarter of this year.

Federal base funding to UC during Q113 was \$320 million below the amount reported during Q1 of the previous year. To date, federal funding still lags behind last year's pace by nearly \$220 million, but much of this \$100 million positive change in UC's federal funding position is a reporting artifact. Changing funding requirements at the National Institutes of Health, which took effect during Q113, pushed the reporting of many awards from that quarter into the fiscal year's second quarter.

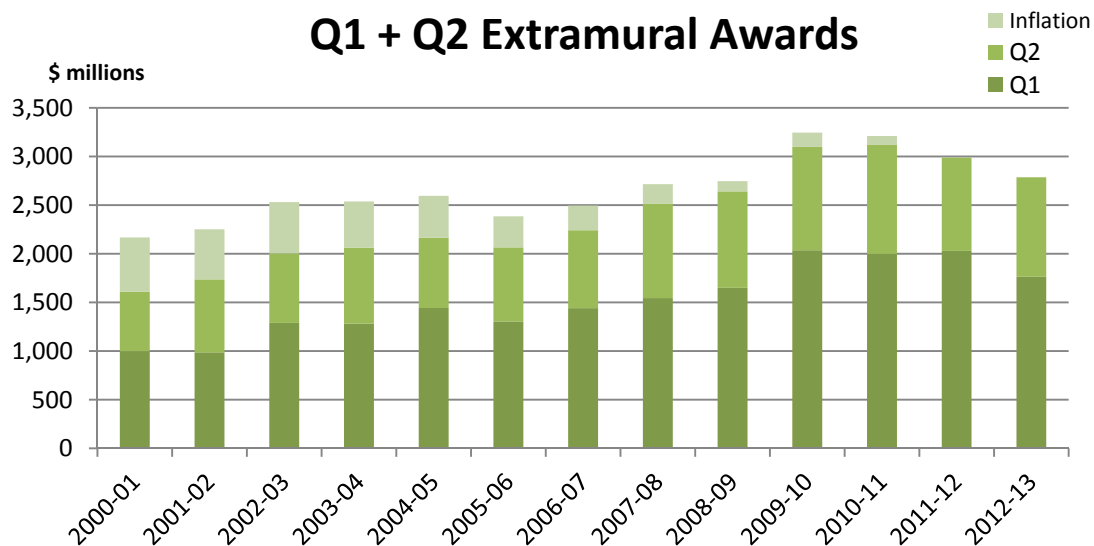
Reporting anomalies aside, federal funding is still far behind last year's pace, and is likely to remain so. It has been apparent for some time that federal agencies have been preparing for appropriations cutbacks by conserving funds, issuing fewer and/or smaller awards, and in some cases providing less than the initially budgeted award amount. These changes have already contributed to a climate of uncertainty regarding federal support, which is only likely to deepen as the full impact of the sequester begins to be felt.

Key findings for Q213 are as follows:

- Federal funding to date, for awards of all types, is running about \$220M below last year, a drop of just over 12%.
- Of the \$1.02 billion UC received in extramural awards during Q213, research awards, including clinical trials, amounted to \$815M, or 79.9% of the award total, compared to 77% for Q212. Federal research funding for the year to date is running about \$224M below last year, a decline of about 14.6%.
- While most locations reported declines in federal and overall funding for the first two quarters, UC San Francisco reported an increase of \$116M in award funds over last year. This contrary result is partly an artifact of procedural and funding changes at NIH, and partly the result of reporting changes at UCSF that moved some FY 2012 awards into FY 2013.
- Award funding for UC's first two fiscal quarters is generally about 55% of the annual total. FY 2013, however, is likely to be an anomalous year because of federal budget uncertainties.
- Current estimates for the annual decline in federal funding range from 6.5 to 7.6. This could result in a reduction in UC's annual federal support of \$200 to \$240M.

I. Quarterly Performance Metrics

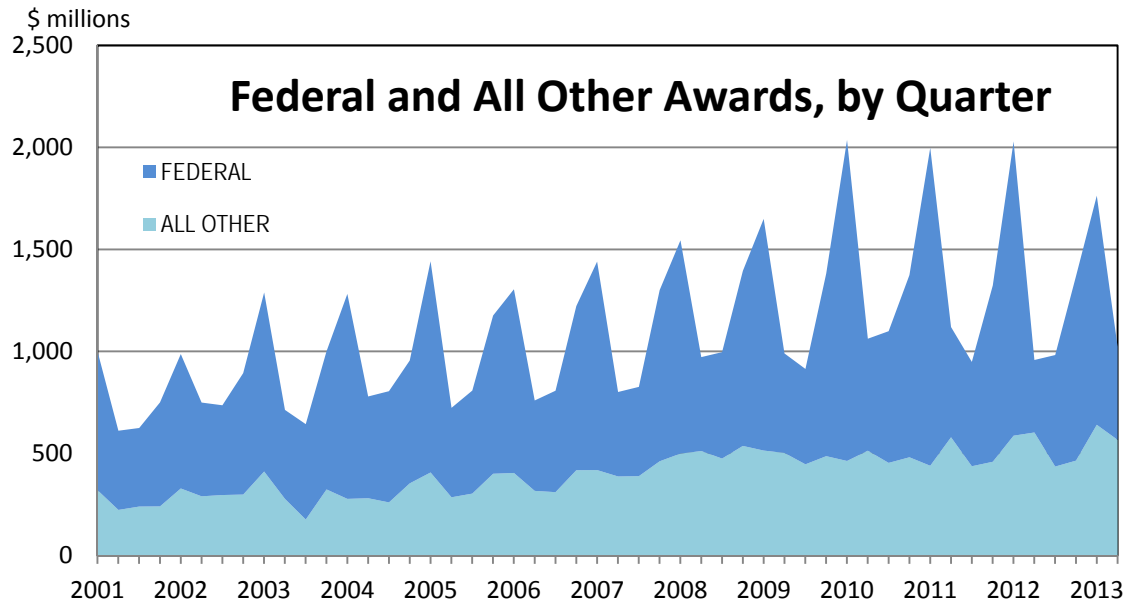
Extramural awards for Q213 totaled about \$1.02 billion, \$65 million (6.79%) above the amount reported during Q212. Year-to-date, however, funding is 6.74% below last year's total.



Quarterly Extramural Awards, FY 2001 – 2013 (\$ millions)

PERIOD	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Q1	999	987	1,290	1,282	1,442	1,305	1,440	1,545	1,650	2,037	1,998	2,030	1,763
Q2	612	750	713	780	724	760	802	972	991	1,063	1,120	958	1,023
Q3	625	737	644	805	809	808	826	997	915	1,099	949	982	-
Q4	750	894	1,002	956	1,177	1,223	1,301	1,395	1,383	1,374	1,324	1,369	-
FY	2,986	3,367	3,649	3,823	4,151	4,096	4,370	4,909	4,938	5,574	5,391	5,340	2,787

Award totals for UC's first fiscal quarter are always the highest for the year, followed by Q4. This is a function of the federal funding cycle, which awards the largest amounts in the final quarter of the federal fiscal year (corresponding to UC's Q1). With direct federal sponsorship providing about two-thirds of all UC's awards, this produces sharp quarterly spikes in funding.



II. Award Trends by Sponsor Category

The decline in overall funding for the fiscal year to date is due to cutbacks in federal agency support. Direct federal award funding for Q1 and Q2 amounted to about \$1.58 billion, or about 57% of the award total, compared to nearly \$1.8 billion a year ago, or about 60%. The peak in federal funding during 2010 and 2011 was due principally to Recovery Act (ARRA) awards.

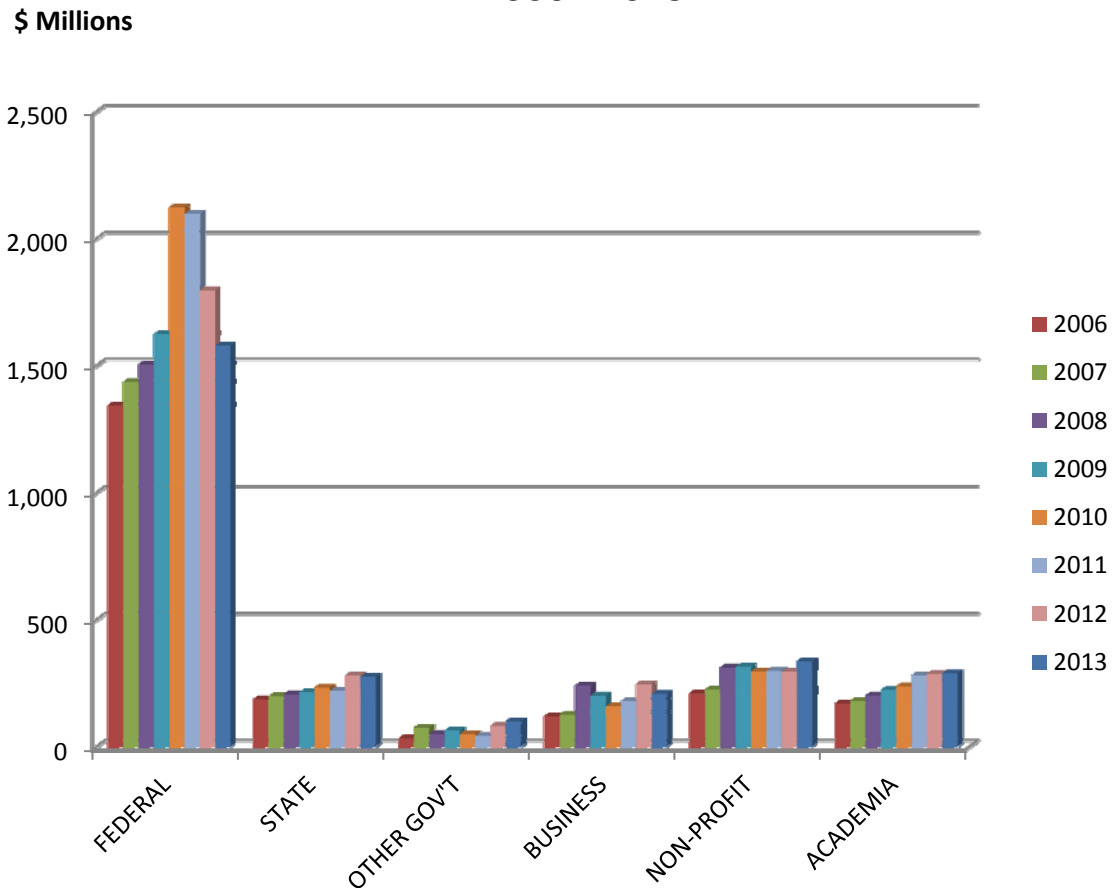
Q1-Q2 Awards by Sponsor Category, FY 2006-2013 (\$ Millions)

SPONSOR	2006	2007	2008	2009	2010	2011	2012	2013
Federal	1,344	1,436	1,505	1,623	2,123	2,098	1,797	1,578
State	187	198	207	214	233	219	280	274
Other Gov't*	33	76	51	64	50	42	82	101
Business	120	127	240	202	159	179	246	208
Non-Profit	211	224	312	314	297	299	295	337
Academia**	171	181	202	223	238	281	288	289
TOTAL	2,065	2,242	2,517	2,641	3,099	3,118	2,988	2,787

* Other Gov't includes Agricultural Market Order Boards.

**Academia includes the categories of Higher Education, DOE Labs, Campuses and UCOP.

Q1+Q2 Awards by Sponsor Category, FY 2006 - 2013



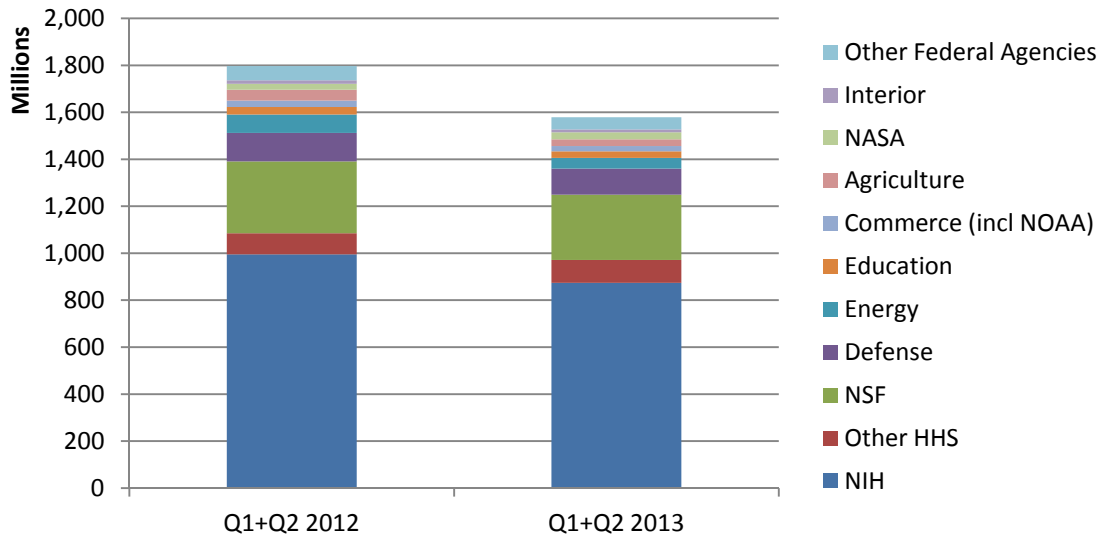
III. Federal Agency Award Trends

Much of the decrease in federal award funding reported for the fiscal year to date is attributable to the National Institutes of Health, which is UC's largest single source of project funds. NIH generally provides nearly 60% of UC's federal funding, and any changes in NIH appropriations or funding practices will inevitably have a significant impact on UC.

NIH funding during FY 2012-13 is proving to be extremely uncertain, largely in response to federal budget issues and the looming sequester. But some of the variability in NIH award reporting is also due to changes in the Department of Health and Human Service's Conflict of Interest requirements, which negatively affected Q113 award reporting. Implementing these new requirements lengthened the award processing cycle on several campuses (notably UCSF and UCLA), and as a consequence, many awards received late in the first quarter of FY 2013 were not reported until Q213. This reporting delay increased the federal funding total for Q213, accounting for essentially all of the \$65 million positive difference between the Q213 award total of \$1.02 billion and the Q212 total of \$958 million.

NIH reporting issues aside, it has been clear for some time that nearly all federal agencies, operating under budgetary constraints and anticipating the sequester, have reduced their levels of funding.

Federal Agency Funding FYTD Comparison



Q1+Q2 Federal Agency Funding, FY 2012 and 2013

AGENCY	Q1+Q2 2012	Q1+Q2 2013	\$\$ DIFFERENCE	% CHANGE
NIH	995,094,552	874,145,957	-120,948,595	-12.2%
Other HHS	90,187,623	97,144,286	6,956,663	7.7%
NSF	305,838,101	277,804,452	-28,033,649	-9.2%
Defense	121,243,930	111,021,490	-10,222,440	-8.4%
Energy	78,405,780	45,935,918	-32,469,862	-41.4%
Education	32,010,895	27,821,932	-4,188,963	-13.1%
Commerce (incl. NOAA)	26,890,243	22,234,419	-4,655,824	-17.3%
Agriculture	46,676,760	29,113,494	-17,563,266	-37.6%
NASA	25,177,963	29,751,808	4,573,845	18.2%
Interior	14,870,019	11,968,478	-2,901,541	-19.5%
Other Federal Agencies	60,865,650	51,787,328	-9,078,322	-14.9%
TOTAL	1,797,261,516	1,578,729,562	-218,531,954	-12.2%

The decline in federal funding to UC spans nearly all agencies. The percentage decrease for non-HHS funding, at 14.7%, is actually slightly higher than for HHS alone. This suggests that the reporting delays due to new HHS procedures have largely cleared the system, and that the \$218 million decrease in federal support for the fiscal year to date reflects budgetary and not timing issues. Award data for Q3 of FY 2013 may provide more clarity.

IV. Award Trends by Project Type

Research awards during Q213 amounted to \$815 million, including \$68 million in clinical trial sponsorship. Training, service and other awards came to about \$208 million. The increase in research funding compared to last year is due in large part to the previously described delays in HHS/NIH reporting, which pushed some awards from Q113 into Q213.

Q2 Award Amounts by Project Type, FY 2006-2013 (\$ millions)

PROJECT TYPE	Q206	Q207	Q208	Q209	Q210	Q211	Q212	Q213
<i>Research</i>	613	556	691	724	847	806	682	747
<i>Clinical Trials</i>	27	35	66	38	39	40	55	68
<i>Training</i>	46	48	52	46	48	48	40	47
<i>Service</i>	36	95	64	94	77	100	90	89
<i>Other</i>	39	67	99	88	52	126	91	73
TOTAL	760	802	972	991	1,063	1,120	958	1,023

V. Major Awards Over \$5M

During Q213, UC received 19 awards for amounts of \$5M or more. Most awards of this magnitude are intended to support ongoing programs, centers, or affiliation agreements rather than specific research projects, and may involve funding that extends over several fiscal years.

LOCATION	SPONSOR CATEGORY	SPONSOR	PROJECT TITLE	AMOUNT
Davis	Federal	U.S. Agency For International Development	Predict: USAID Avian And Pandemic Influenza And Zoonotic Disease Program - Wildlife S.M.A.R.T. Surveillance	21,500,000
San Francisco	State	California Emergency Medical Services Authority	California Poison Control System 2012 - 2014	16,457,142
Berkeley	State	California Office of Traffic Safety	Sobriety Checkpoint Program 2012-2013	13,930,555
Berkeley	DOE Labs	Lawrence Berkeley Lab	Digital Resource Licenses	12,025,563
San Francisco	State	California Department of Public Health	STD Prevention Training Center	8,693,376
San Francisco	Federal	National Institute of Neurological Disorders & Stroke	POINT: Platelet-Oriented Inhibition in New TIA and Minor Ischemic Stroke	8,288,178
San Francisco	Federal	National Cancer Institute	Cancer Center Support Grant	7,831,070
Office Of The President	Foundation	Gordon and Betty Moore Foundation	Completion of Early Construction Phase of the Thirty Meter Telescope (TMT)	7,500,000
Los Angeles	Other Gov't	Los Angeles County Children & Families First	First 5 LA 21st Century Community Dental Homes Project	7,489,521

San Diego	Federal	National Institute of General Medical Science	Lipid Maps	7,153,421
San Diego	Federal	National Institute on Aging	Alzheimer's Disease Cooperative Study (ADCS)	6,081,533
San Francisco	Corporate	Merck & Co., Inc.	Phase I Study of Single Agent MK-3475 in Patients with Progressive Locally Advanced or Metastatic Carcinomas and Melanoma	6,052,693
Los Angeles	Federal	National Cancer Institute	AIDS Malignancy Clinical Trials Consortium (AMC)	6,010,333
Berkeley	Foundation	Gordon And Betty Moore Foundation	An Optical Nanoscope for Imaging Beyond Diffraction Limit	6,000,000
Los Angeles	Federal	PHS (SAMHSA) Prevention - Center for Substance Abuse Prevention	National Center for Child Traumatic Stress	5,998,110
Berkeley	Federal	NASA Goddard Space Flight Center	Time History of Events and Macroscale Interactions During Substorms (THEMIS)	5,783,400
San Francisco	Federal	National Inst. of Allergy and Infectious Diseases	Sexually Transmitted Infections Clinical Trials Group (STICTG)	5,397,861
Davis	State	California Department of Social Services	Resource Center for Family Focused Practice	5,263,800
Davis	Federal	National Institute for Food and Agriculture	Improving Barley and Wheat Germplasm for Changing Environments	5,000,000

VI. Award Trends by Recipient Location

Award totals for the first two quarters of FY 2012-13 were about 6.7% under last year. This drop was unevenly divided, and the large increase in award totals for UCSF was due to internal technical reporting issues.

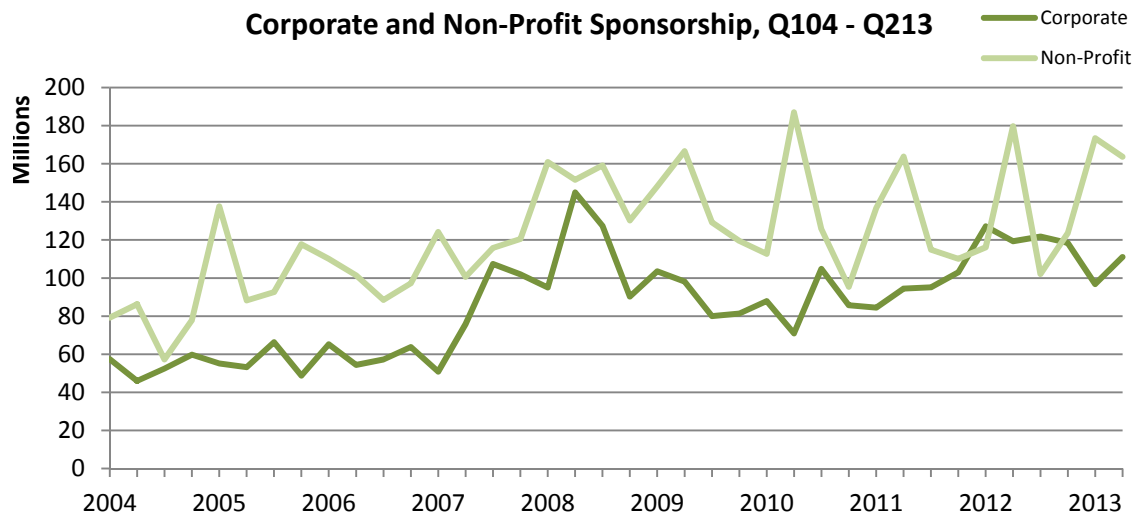
Q1 + Q2 Awards by Location

<i>UC LOCATION</i>	<i>FYTD 2012</i>	<i>FYTD 2013</i>	<i>Change</i>
<i>BERKELEY</i>	483,534,822	443,231,503	-8.3%
<i>SAN FRANCISCO</i>	543,973,741	660,333,872	21.4%
<i>DAVIS</i>	443,195,059	392,623,489	-11.4%
<i>LOS ANGELES</i>	499,664,783	376,963,484	-24.6%
<i>RIVERSIDE</i>	64,009,225	54,094,611	-15.5%
<i>SAN DIEGO</i>	488,890,973	454,475,615	-7.0%
<i>SANTA CRUZ</i>	79,801,092	71,522,456	-10.4%
<i>SANTA BARBARA</i>	111,274,978	86,065,873	-22.7%
<i>IRVINE</i>	158,643,421	141,350,150	-10.9%
<i>MERCED</i>	10,335,839	12,182,321	17.9%
<i>UCOP</i>	27,710,461	24,900,902	-10.1%
<i>LBNL</i>	70,107,957	60,184,645	-14.2%
<i>AG & NAT RES</i>	7,149,628	9,040,992	26.5%
TOTAL	2,988,291,979	2,786,969,913	-6.7%

(*Technical Note:* The only large location showing a substantial increase over 2012 is UCSF. This countervailing trend is mainly due to a one-time reporting issue experienced only by this location. Staffing and system changes during Q412 lengthened the award reporting cycle for UCSF during that quarter, pushing a number of awards from Q412 into the Q113 reporting period. This is why UCSF, unlike the other locations heavily dependent on NIH funding, did not show a large decrease in federal funding during Q113, when the NIH reporting delay occurred. As a consequence, UCSF's award total for the 2013 fiscal year is larger than it would have been under normal reporting. This also means that the systemwide federal funding drop of \$320 million in Q113, compared to the previous year, would have been even larger had it not been for the inclusion of some UCSF awards that were not reported during the previous fiscal year.)

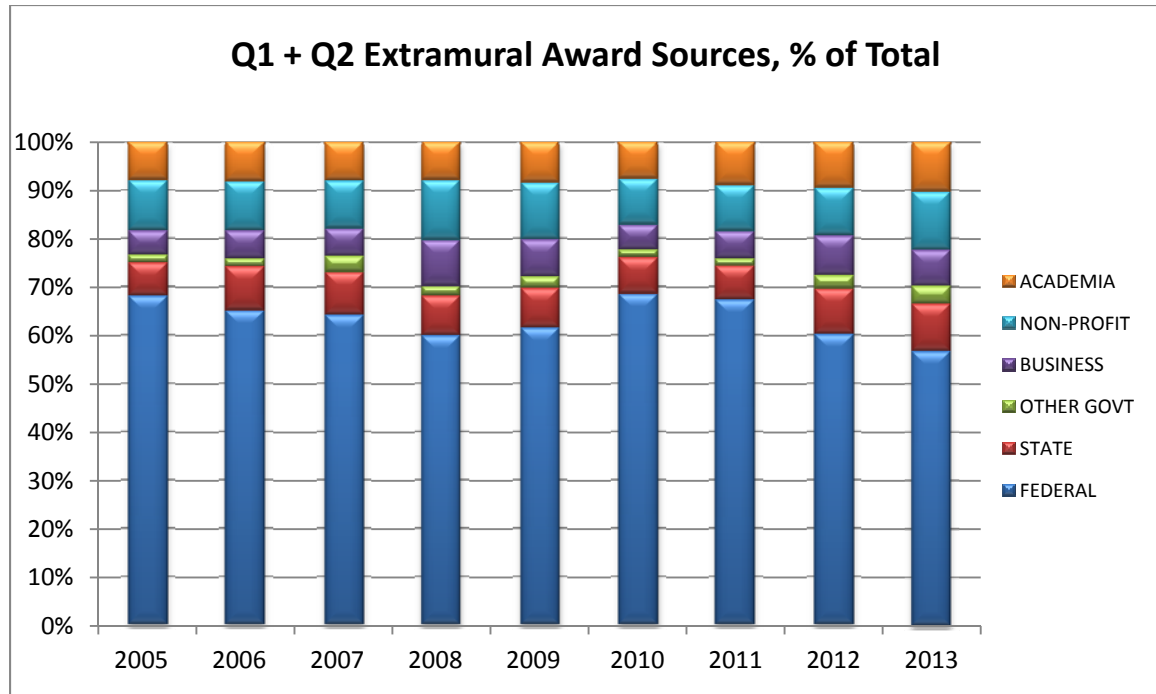
VII. Shifts in Funding and the Effect of the Sequester

With direct federal awards significantly below last year's total to date, private sources are once again increasing in relative importance as a source of extramural funding. Private funding sources from industry and the non-profit sector for the first two quarters of FY 2012-13 totaled nearly \$545 million, or about 1% above where they stood last year. With the sharp decline in agency funding experienced for Q113, the federal contribution has fallen to a record low for the first two fiscal quarters of 56.6%.



Q1+ Q2 Extramural Funding Sources, % of Total

	2005	2006	2007	2008	2009	2010	2011	2012	2013
FEDERAL	68.0%	65.1%	64.0%	59.8%	61.5%	68.5%	67.3%	60.1%	56.6%
STATE	6.9%	9.0%	8.9%	8.2%	8.1%	7.5%	7.0%	9.4%	9.8%
OTHER GOV'T	1.5%	1.6%	3.4%	2.0%	2.4%	1.6%	1.4%	2.7%	3.6%
BUSINESS	5.0%	5.8%	5.6%	9.5%	7.6%	5.1%	5.7%	8.2%	7.5%
NON-PROFIT	10.4%	10.2%	10.0%	12.4%	11.9%	9.7%	9.6%	9.9%	12.1%
ACADEMIA	8.1%	8.3%	8.1%	8.0%	8.5%	7.6%	8.9%	9.6%	10.3%



Given that the reduction in federal agency funding is likely to continue for some time, it is critical to assess the magnitude of the sequester's impact on the nationwide academic R&D effort generally, and specifically on UC. The American Association for the Advancement of Science has estimated that federal support for non-defense R&D would be reduced by about 7.6% per agency. Assuming that federal agency support for activities other than research (such as training and service) would be reduced proportionately, it seems reasonable to estimate the annual effect of the sequester on UC at about 7.6% of the federal award total. Last year, this amounted to \$3.25 billion, suggesting a decline in UC's federal support of about \$240+ million annually.

Other estimates of the sequester's effect on academic R&D, including from the National Cancer Institute, forecast reductions of 6-6.5% per agency, which would translate into about a \$200M decrease in federal funding for UC. Currently, with two quarters of award information, the drop in federal funding stands at \$218M, or right between these two estimates.

Award data are imperfect early indicators of future trends, and the federal funding picture for the remainder of this year and beyond is still unclear. What is certain, though, is that federal agencies are reducing their support for academic R&D and related activities; that UC and other research institutions will all share these cutbacks; and that the result of these cuts will be reduced research activity, reduced staffing levels, and reduced support for graduate and post-doctoral training.

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May, 2013*