

commonfund

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H E P I

H I G H E R E D U C A T I O N P R I C E I N D E X

# HIGHER EDUCATION PRICE INDEX

## INTRODUCTION

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### ABOUT HEPI

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The Higher Education Price Index (HEPI) is an inflation index designed specifically for use by institutions of higher education. Compiled from data reported by government agencies and industry sources, HEPI measures the average relative level in the price of a fixed market basket of goods and services purchased by colleges and universities each year through current fund educational and general expenditures, excluding research. A more accurate indicator of cost changes for colleges and universities than the Consumer Price Index (CPI), HEPI is used primarily to project future budget increases required to preserve purchasing power. With compilations dating back to 1961, HEPI offers 48 continuous years of higher education inflation data. It is an essential tool enabling schools to determine increases in funding necessary to maintain both real purchasing power and investment.

In 2005, Commonfund Institute assumed responsibility for the index and the proprietary model used to calculate HEPI's values from Research Associates of Washington, D.C. In 2007, in keeping with its commitment to improving and expanding the index, Commonfund Institute inaugurated two additional HEPI services:

- ▾ HEPI calculated by type of institution for six different categories of public and private colleges and universities, and
- ▾ the monthly release, beginning in January of each year, of a forecast of HEPI for the coming fiscal year end.

Beginning this year, two further improvements have been introduced. First, the estimates and the final HEPI calculation are now being calculated using data series that are entirely aligned with the July-June academic fiscal year. Prior to this, the index had been calculated using data drawn from series with various monthly endpoints.

The resulting timing differences in the underlying data sometimes led HEPI to seem too high or too low relative to the CPI. In particular, the volatile Utilities and Materials & Supplies components of the index, which were compiled on a calendar year rather than a fiscal year basis, have in recent years caused the final HEPI to be lower or higher than might be expected.

Adoption of this improved methodology has led to a restatement of HEPI for the years 2002-2008, which is reflected in the tables and discussion in this Report. HEPI data prior to 2002 have not been restated.

In addition, this year for the first time we are making available HEPI calculated by region.

All HEPI services are provided free of charge via Commonfund Institute's website at [www.commonfund.org](http://www.commonfund.org).

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### ABOUT COMMONFUND INSTITUTE

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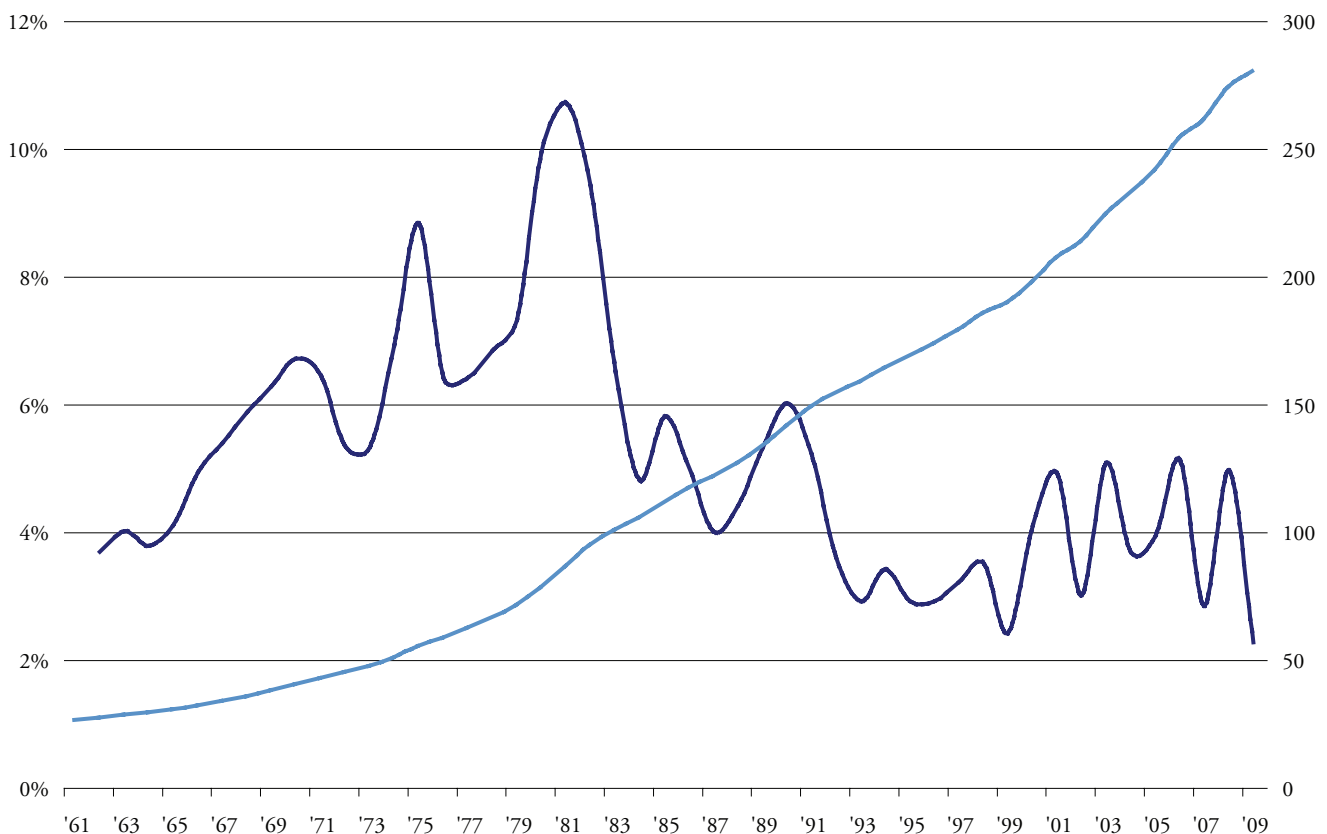
Commonfund Institute was founded to house the education and research activities of Commonfund and to provide the entire nonprofit community with investment information and professional development programs. Commonfund Institute is dedicated to the advancement of investment knowledge and the promotion of best practices in financial management. Commonfund Institute provides a wide variety of resources, including conferences, seminars and roundtables on topics such as endowment and treasury management; proprietary and third-party research and publications including the annual NACUBO-Commonfund Study of Endowments and the Commonfund Benchmarks Study®; and events such as the annual Commonfund Endowment Institute and the Commonfund Prize for the best contribution to endowment investment research. Its broad range of programs and services is designed to serve financial practitioners, fiduciaries and scholars.

## THE HEPI TABLES

The chart below shows HEPI from FY1961 to FY2009. Table A on page 3 summarizes HEPI and CPI for the same period. Table B on page 4 summarizes the regression formula used since FY2002 to calculate HEPI. Table C on page 10 shows HEPI for public and private institutions, as a whole and by type of institution. Table D on

page 14 shows HEPI for all educational institutions by region. HEPI data beginning with FY2002 have been restated to reflect the methodological improvements adopted this year. Tables E and F on pages 19 and 20 trace the purchasing power of current salaries of full-time professors compared with previous years, using data from selected public and private institutions.

### HIGHER EDUCATION PRICE INDEX 1961 - 2009



*This chart traces the Higher Education Price Index (HEPI) from 1961 to 2009. Cumulative HEPI is represented by the steadily increasing blue line, indexed to 100 for 1983, and should be read using the right-hand scale. The jagged gray line traces percentage year-over-year changes in HEPI and should be read using the left-hand scale. In this chart and in the supporting data in Table A on page 3, the HEPI is presented in two ways—as an index level and as a year-over-year percent change. HEPI data beginning with FY2002 have been restated to reflect the methodological improvements adopted this year.*

TABLE A

HISTORICAL SUMMARY OF HIGHER EDUCATION PRICE INDEX AND CONSUMER PRICE INDEX FY1961 TO FY2009									
	College and university operations		Consumer prices			College and university operations		Consumer prices	
Fiscal year	HEPI Index Value 1983 = 100	Yearly % Change	CPI Index Value 1983 = 100	Yearly % Change	Fiscal year	HEPI Index Value 1983 = 100	Yearly % Change	CPI Index Value 1983 = 100	Yearly % Change
1961	25.6	—	30.3	—	1986	116.3	5.0%	110.8	2.9%
1962	26.5	3.7%	30.6	1.0%	1987	120.9	4.0%	113.3	2.2%
1963	27.6	4.0%	31.0	1.1%	1988	126.2	4.4%	118.0	4.1%
1964	28.6	3.8%	31.4	1.4%	1989	132.8	5.3%	123.5	4.7%
1965	29.8	4.1%	31.8	1.3%	1990	140.8	6.0%	129.4	4.8%
1966	31.3	4.9%	32.6	2.3%	1991	148.2	5.2%	136.4	5.4%
1967	32.9	5.4%	33.5	3.0%	1992	153.5	3.6%	140.8	3.2%
1968	34.9	5.9%	34.6	3.3%	1993	157.9	2.9%	145.2	3.1%
1969	37.1	6.3%	36.3	4.8%	1994	163.3	3.4%	148.8	2.5%
1970	39.5	6.7%	38.5	5.9%	1995	168.1	2.9%	153.2	3.0%
1971	42.1	6.4%	40.5	5.2%	1996	173.0	2.9%	157.4	2.7%
1972	44.3	5.3%	41.9	3.6%	1997	178.4	3.2%	161.9	2.9%
1973	46.7	5.3%	43.6	3.9%	1998	184.7	3.5%	164.8	1.8%
1974	49.9	6.9%	47.5	8.9%	1999	189.1	2.4%	167.6	1.7%
1975	54.3	8.8%	52.8	11.2%	2000	196.9	4.1%	172.5	2.9%
1976	57.8	6.4%	56.5	7.1%	2001	206.5	4.9%	178.4	3.4%
1977	61.5	6.4%	59.8	5.8%	2002	212.7	3.0%	181.6	1.8%
1978	65.7	6.8%	63.8	6.8%	2003	223.5	5.1%	185.5	2.2%
1979	70.5	7.3%	69.8	9.3%	2004	231.7	3.7%	189.6	2.2%
1980	77.5	9.9%	79.1	13.3%	2005	240.8	3.9%	195.3	3.0%
1981	85.8	10.7%	88.2	11.6%	2006	253.1	5.1%	202.7	3.8%
1982	93.9	9.4%	95.8	8.7%	2007	260.3	2.8%	208.0	2.6%
1983	100.0	6.5%	100.0	4.3%	2008	273.2	5.0%	215.7	3.7%
1984	104.8	4.8%	103.7	3.7%	2009	279.3	2.3%	218.7	1.4%
1985	110.8	5.8%	107.7	3.9%					

Sources: HEPI, Research Associates of Washington and Commonfund Institute, July 1–June 30 data  
CPI, U.S. Department of Labor, data is calculated to July 1–June 30 (annual published CPI is computed over the calendar 12-month period)

**TABLE B**

HIGHER EDUCATION PRICE INDEX 2002–2009										
REGRESSION ANALYSIS OF COMPONENTS—FY1961 TO FY2001										
	Fiscal	Regression HEPI	Faculty salaries	Administrative salaries	Clerical	Service Employees	Fringe Benefits	Miscellaneous services	Supplies and material	Utilities
Index Value	2002	212.7	222.7	236.4	205.4	189.6	277.1	205.8	128.2	118.1
	2003	223.5	229.4	255.7	211.1	193.9	292.3	209.5	132.2	157.6
	2004	231.7	234.2	263.3	217.1	197.6	312.8	216.4	135.6	176.4
	2005	240.8	240.7	274.0	223.4	201.4	327.2	222.7	145.5	200.2
	2006	253.1	248.2	287.7	229.5	205.5	343.7	228.8	158.1	255.7
	2007	260.3	257.6	299.2	237.7	213.6	360.8	238.3	165.3	220.6
	2008	273.2	268.1	314.0	245.1	220.5	380.7	246.4	180.0	252.0
	2009	279.4	277.3	330.9	251.6	226.7	394.4	253.1	181.5	214.0
	Standard Deviatinn	2002-2009	23.8	19.2	31.5	16.4	13.1	41.5	17.2	21.1
Yearly % Change	2002	1.9%	3.8%	3.1%	3.9%	3.8%	5.9%	3.0%	-2.7%	-30.5%
	2003	5.1%	3.0%	8.2%	2.8%	2.3%	5.5%	1.8%	3.1%	33.5%
	2004	3.7%	2.1%	3.0%	2.8%	1.9%	7.0%	3.3%	2.6%	11.9%
	2005	3.9%	2.8%	4.1%	2.9%	1.9%	4.6%	2.9%	7.3%	13.5%
	2006	5.1%	3.1%	5.0%	2.7%	2.0%	5.0%	2.7%	8.7%	27.7%
	2007	2.8%	3.8%	4.0%	3.6%	4.0%	5.0%	4.2%	4.5%	-13.7%
	2008	5.0%	4.1%	5.0%	3.1%	3.2%	5.5%	3.4%	8.9%	14.2%
	2009	2.3%	3.4%	5.4%	2.7%	2.8%	3.6%	2.7%	0.9%	-15.0%

**SUMMARY OUTPUT**

**Regression Statistics**

Multiple R	0.999998904
R Square	0.999997809
Adjusted R Square	0.999997261
Standard Error	0.096391663
Observations	41

**Coefficients**

Intercept	-0.286286907
Faculty	0.353741718
Administrative	0.104289477
Clerical	0.184085850
Service	0.082314971
Fringe	0.131020859
Services	0.022899544
Supplies	0.055138426
Utilities	0.068247106

# HIGHER EDUCATION PRICE INDEX ANALYSIS

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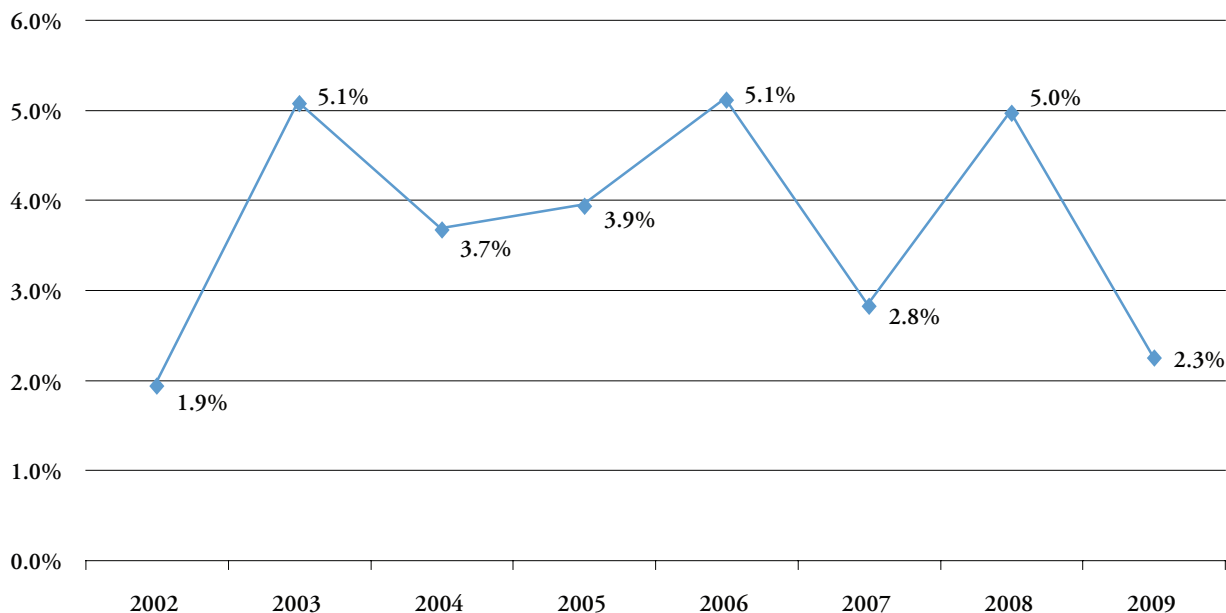
## HEPI FOR 2009

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For fiscal 2009, which ended on June 30, the HEPI calculation reveals that inflation for colleges and universities was 2.3 percent, less than half the rate for FY2008. HEPI for FY2009 was 270 basis points (2.7 percent) below the 5.0 percent restated rate for FY2008 and 50 basis points (0.5 percent) below the 2.8 percent restated rate for FY2007.

FIGURE 1

The Higher Education Price Index FY2002 - 2009



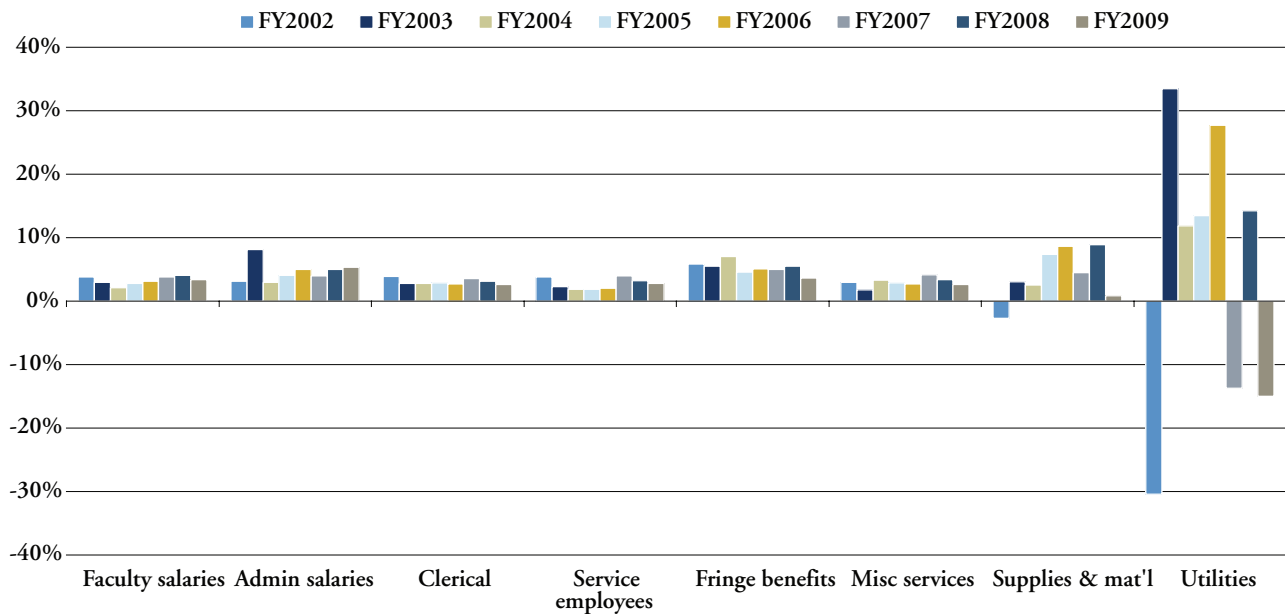
There are eight cost factors that contribute to the HEPI regression calculation: faculty salaries, administrative salaries, clerical salaries, service employee salaries, fringe benefits, miscellaneous services, supplies and materials, and utilities. The regression equation assigns a different weighting to each cost factor, and therefore a change in one component may influence the final HEPI calculation more than another. The components that are most heavily weighted are faculty and clerical salaries and fringe benefits. Supplies and materials and utilities represent the second-lowest and third-lowest weightings, respectively. The chief cause of the decline in HEPI from FY2008 to FY2009 was a marked slowing in the rates of inflation for these two categories.

While the combined weighting of these two factors in the regression equation that determines the final HEPI is only 12.3 percent, their rates of inflation in FY2009 continued the pattern of volatility that has been observed in recent years. The inflation rate for supplies and materials, which was 8.9 percent in FY2008, was only 0.9 percent in FY2009, while the rate for utilities, which was a high 14.2 percent in FY2008, was actually negative – a deflation rate – at -15.0 percent in FY2009. Taken together, the effect of these two factors on the FY2009 HEPI far outweighs the total for the other six factors.

Figure 2 shows a graphical representation of the changes in these cost factors from FY2002-09. The highest increase for FY2009 came from administrative salaries, which had an inflation rate of 5.4 percent for the year, up from a 5.0 percent rise in FY2008. Fringe benefit costs had the second-highest inflation rate, at 3.6 percent, a deceleration from 5.5 percent last year. Close behind were faculty salaries, which rose at a rate of 3.4 percent, down from a 4.1 percent rate in FY2008.

The other components of HEPI had inflation rates that clustered in a narrow range between 2.7 percent and 2.8 percent, with clerical salaries rising by 2.7 percent, down from 3.1 percent in FY2008; inflation for service employee salaries slowing to 2.8 percent from 3.2 percent; and inflation for miscellaneous service costs decelerating to 2.7 percent from 3.4 percent.

FIGURE 2  
Annual Percentage Changes in the Eight HEPI Cost Factors, FY2002 - 2009

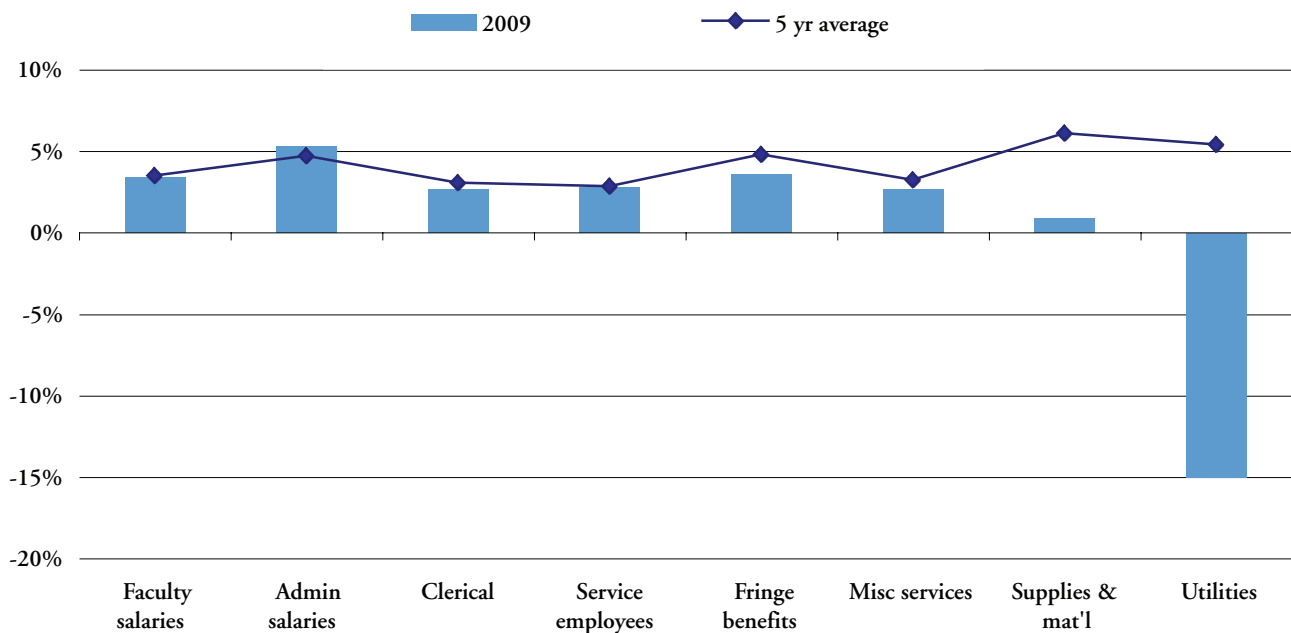


## HEPI FOR FY2009 VERSUS A FIVE-YEAR AVERAGE

Figure 3 shows the results of a longer-term analysis of HEPI's components that compares the reported rates for FY2009 against their historical five-year averages. On this basis, the greatest deviation from the five-year average was in the category of utilities, which saw an inflation rate of -15.0 percent for FY2009, 2,030 basis points lower than the five-year average of 5.3 percent. The change in supplies and materials costs was 520 basis points lower than the five-year average for this factor, at 0.9 percent versus 6.1 percent.

With the exception of the decrease in fringe benefit costs, which was 110 basis points below its five-year average, all the other factors were close to their five-year averages, by amounts ranging from a negative 50 to a positive 70 basis points.

FIGURE 3  
Annual Percentage Changes in the Eight HEPI Cost Factors vs. 5-year average



Over the five-year period, utilities rates have seen the most volatility, owing to an increase in FY2006 of 27.7 percent, partially offset by a rate of -13.7 percent in FY2007. The component that has been most stable has been clerical salaries: inflation for this factor every year has been in the 2.7 to 3.1 percent range, with the exception of an increase to 3.6 percent for FY2007.



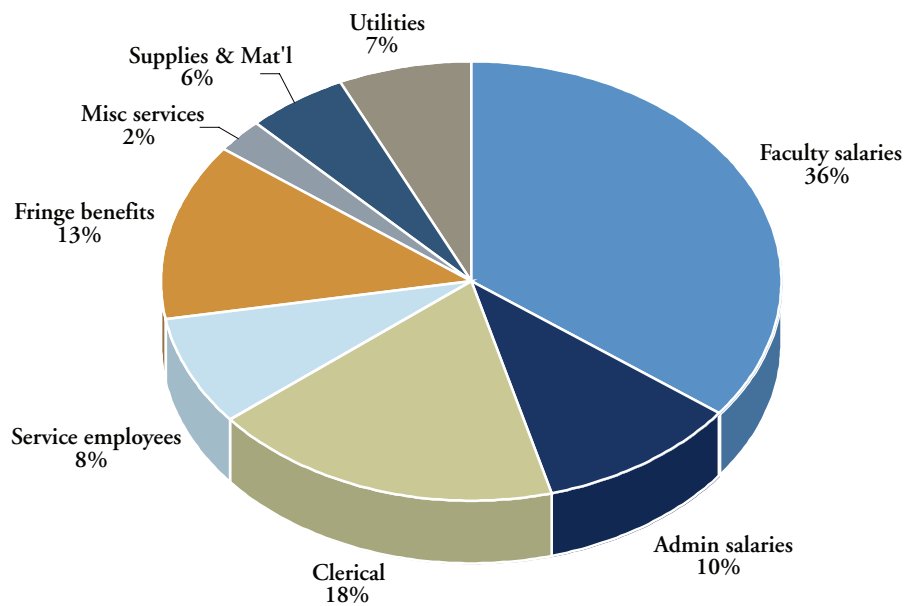
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## SENSITIVITY ANALYSIS OF THE EIGHT HEPI REGRESSION COMPONENTS

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Figure 4 shows how the HEPI regression equation assigns a different weighting to each cost factor. Owing to the large variance in these weightings (a difference of 34 percentage points between the high and low), an increase in one component may influence the final HEPI calculation more than an identical increase in another. Those components that are most heavily weighted are faculty and clerical salaries and fringe benefits. Utilities represent the third-lowest weighting, a fact that has served to mitigate somewhat the effect of the extreme volatility that has characterized this cost factor in recent years.

FIGURE 4  
HEPI Cost Factor Weightings



The sensitivity analysis in Figure 5 shows that a 5 percent increase in faculty salaries, the largest component of HEPI, from an index value of 277.3 to 291.2, has the effect of increasing HEPI by 180 basis points, keeping all other components constant. However, a similar 5 percent increase in the index for miscellaneous services, the smallest component, has the effect of adding only 10 basis points to HEPI.

FIGURE 5  
Sensitivity of HEPI to a 5 percent increase in Faculty Salaries or Miscellaneous Services

	Total	Faculty salaries	Admin salaries	Clerical	Service employees	Fringe benefits	Misc. services	Supplies & material	Utilities
<b>Current</b>									
Index Value	279.4	277.3	330.9	251.6	226.7	394.4	253.1	181.5	214.0
Yearly % Change	2.3%	3.4%	2.7%	2.8%	3.6%	2.7%	0.9%	4.7%	0.9%
<b>Scenario: Faculty Salaries up 5%</b>									
Index Value	284.3	291.2	251.6	226.7	394.4	253.1	181.5	169.8	225.4
Yearly % Change	4.1%	8.6%	2.7%	2.8%	3.6%	2.7%	0.9%	4.7%	0.9%
Δ	<b>180 b.p.</b>	<b>520 b.p.</b>							
<b>Scenario: Misc. Services up 5%</b>									
Index Value	279.7	277.3	251.6	226.7	394.4	265.8	181.5	169.8	225.4
Yearly % Change	2.4%	3.4%	2.7%	2.8%	3.6%	7.8%	0.9%	4.7%	0.9%
Δ	<b>10 b.p.</b>						<b>510 b.p.</b>		

# HIGHER EDUCATION PRICE INDEX FOR DIFFERENT TYPES OF EDUCATIONAL INSTITUTIONS

## PUBLIC VS. PRIVATE INSTITUTIONS - FY2009

As noted earlier, beginning in FY2007 Commonfund expanded its HEPI service to include calculations of HEPI for eight categories of educational institution:

- ▾ Public institutions as a whole
- ▾ Public doctoral degree-granting institutions
- ▾ Public masters' degree-granting institutions
- ▾ Public two-year colleges
- ▾ Private institutions as a whole
- ▾ Private doctoral degree-granting institutions
- ▾ Private masters' degree-granting institutions
- ▾ Private baccalaureate institutions

These indices were calculated using the appropriate faculty salary and fringe benefit information for each type of institution, while holding the other six HEPI cost factors constant. Table C below shows HEPI for FY2002-2009 for these institutions.

**TABLE C**

HIGHER EDUCATION PRICE INDEX 2002-2009										
BY MAJOR CATEGORIES OF PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS										
		NATIONAL	PUBLIC INSTITUTIONS				PRIVATE INSTITUTIONS			
	Fiscal year	Total	Total	Doctoral	Master's	2 Year College	Total	Doctoral	Master's	Baccalaureate
Index Value	2002	212.7	211.5	225.8	215.2	212.8	219.4	241.2	222.6	224.2
	2003	223.5	222.3	238.0	227.1	225.3	230.1	253.4	234.3	236.3
	2004	231.7	230.0	246.4	233.9	231.4	240.0	265.2	244.5	245.2
	2005	240.8	239.0	257.1	243.0	239.9	249.5	277.0	251.7	254.5
	2006	253.1	251.1	270.9	254.0	250.5	262.5	291.4	268.2	266.8
	2007	260.3	258.4	279.9	262.2	259.2	269.5	301.2	272.8	273.9
	2008	273.2	271.2	295.2	275.0	273.9	282.5	315.4	285.6	287.9
	2009	279.3	276.8	302.1	280.6	275.5	290.5	325.7	295.8	295.7
Yearly % Change	2002	1.9%	2.0%	3.2%	1.9%	2.4%	1.6%	4.0%	1.5%	1.6%
	2003	5.1%	5.1%	5.4%	5.5%	5.9%	4.9%	5.0%	5.3%	5.4%
	2004	3.7%	3.5%	3.6%	3.0%	2.7%	4.3%	4.7%	4.4%	3.7%
	2005	3.9%	3.9%	4.3%	3.9%	3.7%	3.9%	4.4%	2.9%	3.8%
	2006	5.1%	5.1%	5.4%	4.5%	4.4%	5.2%	5.2%	6.5%	4.8%
	2007	2.8%	2.9%	3.3%	3.2%	3.5%	2.7%	3.4%	1.7%	2.7%
	2008	5.0%	5.0%	5.5%	4.9%	5.7%	4.8%	4.7%	4.7%	5.1%
	2009	2.3%	2.0%	2.3%	2.1%	0.6%	2.8%	3.3%	3.6%	2.7%

Public institutions as a whole reported lower HEPI rates than their private counterparts for FY2009. Public institutions' HEPI was 2.0 percent, 80 basis points less than the 2.8 percent rise reported for private institutions. Looking at the index components for the two types of institution, inflation in fringe benefits was 210 basis points lower at public institutions, at 3.1 percent versus 5.2 percent for private institutions, and inflation in faculty salaries was 90 basis points lower, at 3.1 percent versus 4.0 percent.

Examining changes in HEPI by institutional classification, public doctoral institutions had a HEPI of 2.3 percent, down from 5.5 percent in FY2008, while private doctoral institutions saw the index rise 3.3 percent, down from 4.7 percent – a difference for FY2009 of 100 basis points. Fringe benefits rose 3.6 percent at public institutions, representing a deceleration from last year's 6.3 percent rate, but 4.9 percent at private institutions, up from 3.7 percent the previous year. Faculty salaries rose at a 3.4 percent rate at public institutions, down from 5.0 percent, and at a 5.0 percent rate at private institutions, up slightly from 4.7 percent in FY2008.

Public master's degree-granting institutions also had lower inflation rates than their private counterparts, with the public institutions' HEPI at 2.1 percent, less than half of FY2008's rate of 4.9 percent, while the private institutions' index was 150 basis points higher, at 3.6 percent, down from 4.7 percent the previous year. Public institutions had an inflation rate for faculty salaries of 3.4 percent, down from 4.6 percent, while for private institutions the rate was 4.0 percent, essentially unchanged from FY2008's rate of 3.9 percent. Fringe benefits rose at a 2.6 percent rate at public institutions, down from 4.2 percent the previous year, but at a much higher rate of 8.8 percent at private institutions, nearly double last year's 4.5 percent. While this rate of increase in fringe benefit expenses for private institutions is undoubtedly high, it is not without recent precedent: in FY2006, fringe benefits for private masters' degree-granting institutions rose by 11.8 percent.

Turning to undergraduate institutions, the data for public two-year colleges and private baccalaureate institutions are not directly comparable for a number of reasons, notably the difference in the period of matriculation. Public two-year colleges saw HEPI rise 0.6 percent, down sharply from 5.7 percent in FY2007, and private baccalaureate-granting institutions saw HEPI rise 2.7 percent, down from 5.1 percent last year.

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#### COST FACTOR DIFFERENCES BY INSTITUTION TYPE

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As shown in Figures 6 and 7, faculty salaries – the most heavily weighted component of HEPI – saw an increase of 3.1 percent at public institutions overall while rising 4.0 percent at private institutions. Faculty salaries at public two-year colleges saw the highest HEPI increase of 4.0 percent, followed by public doctoral and master's institutions, which each saw a 3.4 percent increase. Faculty salaries at private institutions were also up; salaries at private doctoral institutions rose 5.0 percent, master's degree-granting institutions were up 4.0 percent and baccalaureate institutions saw a 3.8 percent rise.

FIGURE 6

FY2009 Faculty Salaries - Public Institutions

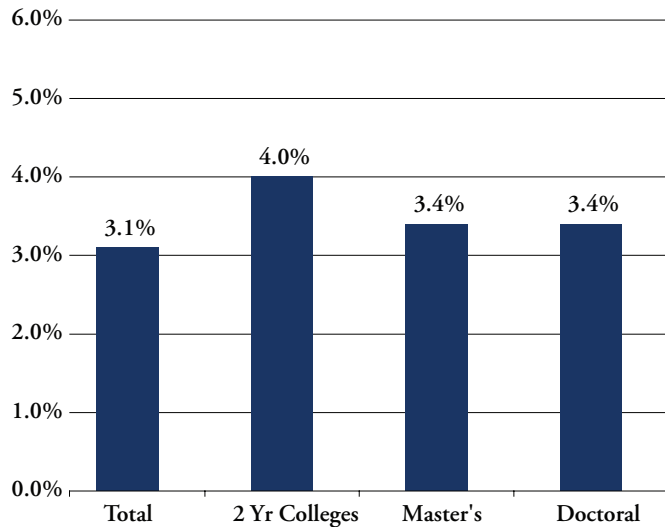
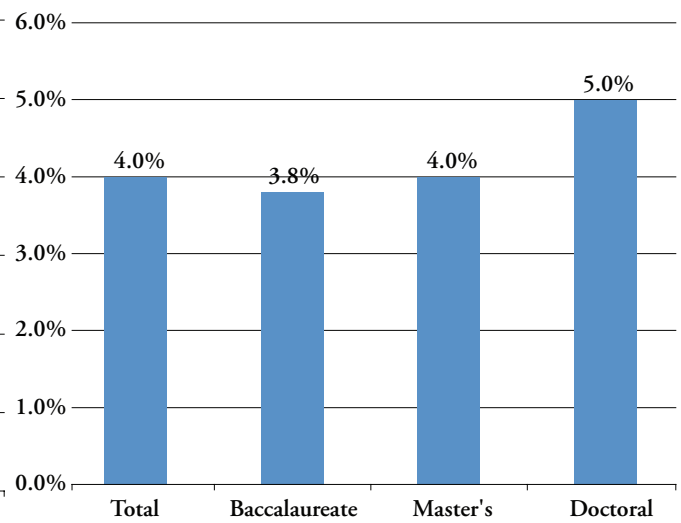


FIGURE 7

FY2009 Faculty Salaries - Private Institutions



Figures 8 and 9 show that at public institutions, fringe benefit costs rose 3.1 percent compared with 5.2 percent at private institutions. Within public institutions, doctoral institutions saw a rise in fringe benefits of 3.6 percent. The cost of fringe benefits for public master's degree-granting institutions was up 2.6 percent for 2008, while at two-year colleges fringe benefit costs actually declined by 6.1 percent, a retrenchment from the two previous years of strong growth at 8.1 and 11.6 percent, respectively.

Fringe benefits for private master's degree-granting institutions rose strongly by 8.8 percent. At private doctoral institutions, fringe benefits rose by 4.9 percent, while at baccalaureate institutions the rise in fringe benefit costs was 4.8 percent.

FIGURE 8

FY2009 Fringe Benefits - Public Institutions

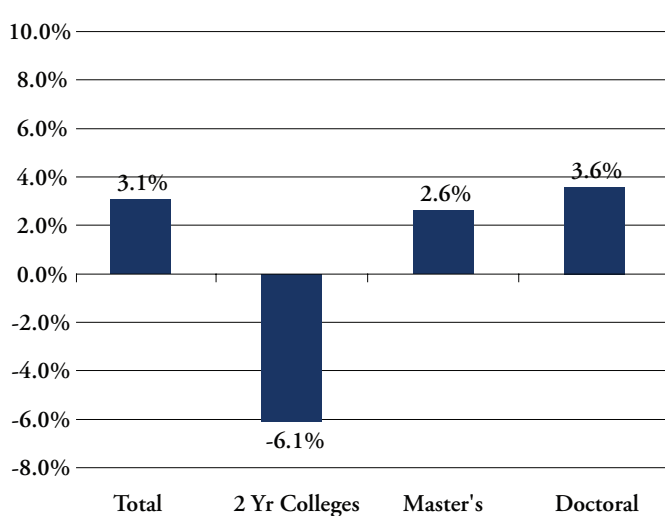
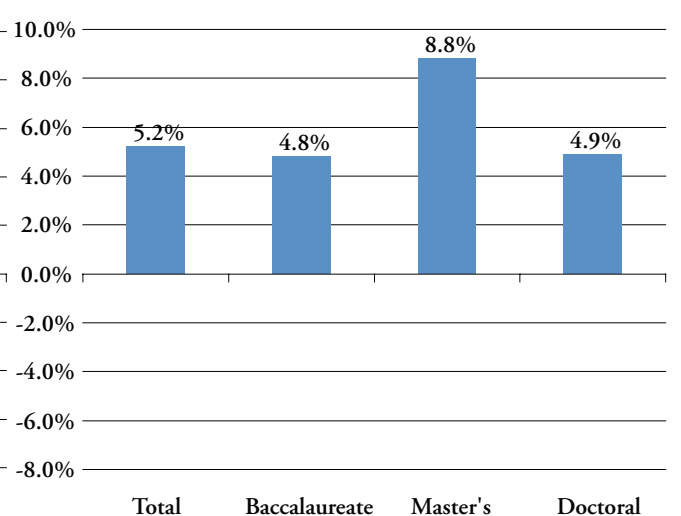


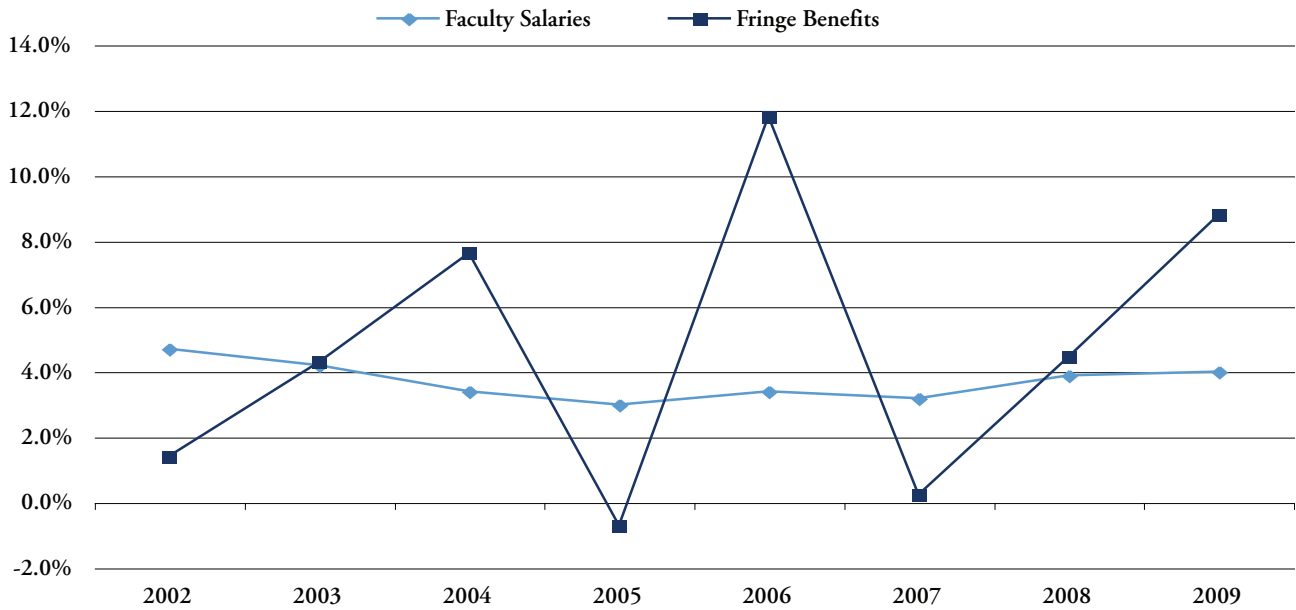
FIGURE 9

FY2009 Fringe Benefits - Private Institutions



As shown in Figure 10, over the past six years private master's degree-granting institutions have shown considerable volatility in the rate of change in fringe benefit costs, while salaries appear to have been more stable.

FIGURE 10  
Private Master's Degree-granting Institutions



The other HEPI components – clerical salaries, administrative salaries, service employee salaries, miscellaneous services, supplies and materials, and utilities – were kept in line with the overall averages for both public and private institutions.

# HIGHER EDUCATION PRICE INDICES FOR DIFFERENT REGIONS OF THE COUNTRY

Beginning this year, Commonfund has further expanded its HEPI service to include calculations of HEPI for the nine standard census divisions of the United States:\*

- ▼ New England: Connecticut, Maine, Massachusetts, New Hampshire, Rhode Island, Vermont
- ▼ Middle Atlantic: New Jersey, New York, Pennsylvania
- ▼ East North Central: Illinois, Indiana, Michigan, Ohio, Wisconsin
- ▼ West North Central: Iowa, Kansas, Minnesota, Missouri, Nebraska, North Dakota, South Dakota
- ▼ South Atlantic: Delaware, District of Columbia, Florida, Georgia, Maryland, North Carolina, Puerto Rico, South Carolina, Virginia, West Virginia
- ▼ East South Central: Alabama, Kentucky, Mississippi, Tennessee
- ▼ West South Central: Arkansas, Louisiana, Oklahoma, Texas
- ▼ Mountain: Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Utah, Wyoming
- ▼ Pacific: Alaska, California, Guam, Hawaii, Oregon, Washington

These indices were calculated using the appropriate faculty salary and fringe benefit information for each region, while holding the other six HEPI cost factors constant. Table D below shows HEPI for FY2002-2009 for the nine regions.

**TABLE D**

HIGHER EDUCATION PRICE INDEX 2002-2009											
SUMMARIZED BY REGION											
	Fiscal Year	HEPI National	New England	Middle Atlantic	South Atlantic	East North Central	West North Central	East South Central	West South Central	Mountain	Pacific
Index Value	2002	212.7	213.2	208.6	211.9	212.0	214.0	209.9	215.3	212.2	222.5
	2003	223.5	220.3	222.1	219.3	224.8	223.0	219.9	227.2	223.4	234.0
	2004	231.7	229.9	230.7	226.8	232.4	233.1	229.8	233.1	230.3	243.2
	2005	240.8	240.4	239.8	236.3	241.2	242.6	242.1	242.0	241.8	251.1
	2006	253.1	254.1	250.0	249.5	252.1	254.5	250.7	256.2	253.2	265.5
	2007	260.3	262.5	257.3	257.5	257.6	261.5	262.1	265.2	260.0	272.1
	2008	273.2	274.0	270.0	269.8	269.5	272.2	276.3	277.3	278.2	287.8
	2009	279.3	283.2	277.1	275.2	275.8	280.6	281.9	283.2	285.0	295.3
Yearly % Change	2002	1.9%	-0.6%	1.0%	2.6%	2.7%	3.6%	1.6%	4.3%	2.8%	7.7%
	2003	5.1%	3.3%	6.5%	3.5%	6.0%	4.2%	4.8%	5.5%	5.3%	5.2%
	2004	3.7%	4.4%	3.9%	3.4%	3.4%	4.5%	4.5%	2.6%	3.0%	3.9%
	2005	3.9%	4.6%	3.9%	4.2%	3.8%	4.1%	5.4%	3.8%	5.0%	3.2%
	2006	5.1%	5.7%	4.3%	5.6%	4.5%	4.9%	3.5%	5.9%	4.7%	5.8%
	2007	2.8%	3.3%	2.9%	3.2%	2.2%	2.7%	4.6%	3.5%	2.7%	2.5%
	2008	5.0%	4.4%	4.9%	4.8%	4.6%	4.1%	5.4%	4.6%	7.0%	5.8%
	2009	2.3%	3.4%	2.6%	2.0%	2.4%	3.1%	2.0%	2.1%	2.5%	2.6%

\* A map showing the regions may be found at [http://www.census.gov/geo/www/us\\_regdiv.pdf](http://www.census.gov/geo/www/us_regdiv.pdf)

The 2009 HEPI, which was 2.3 percent on a national basis, ranged from a high of 3.4 percent in the New England region to a low of 2.0 percent in the East South Central and South Atlantic regions. With the exception of New England and the West North Central region, where HEPI was 3.4 percent and 3.1 percent respectively, no region had a FY2009 HEPI figure higher than 2.6 percent.

In all regions, the FY2009 HEPI represented a significant slowdown in inflation from FY2008. While in most regions the index declined from a 4-5 percent range to a 2-3 percent range, in some areas the reduction was more marked. In the Mountain region, where FY2008 HEPI was 7.0 percent, the FY2009 figure was 2.5 percent – a reduction of nearly two-thirds. In the Pacific region, the FY2008 HEPI of 5.8 percent was reduced to 2.6 percent in FY2009. And in the East South Central region, FY2008’s figure of 5.4 percent declined to 2.0 percent for FY2009.

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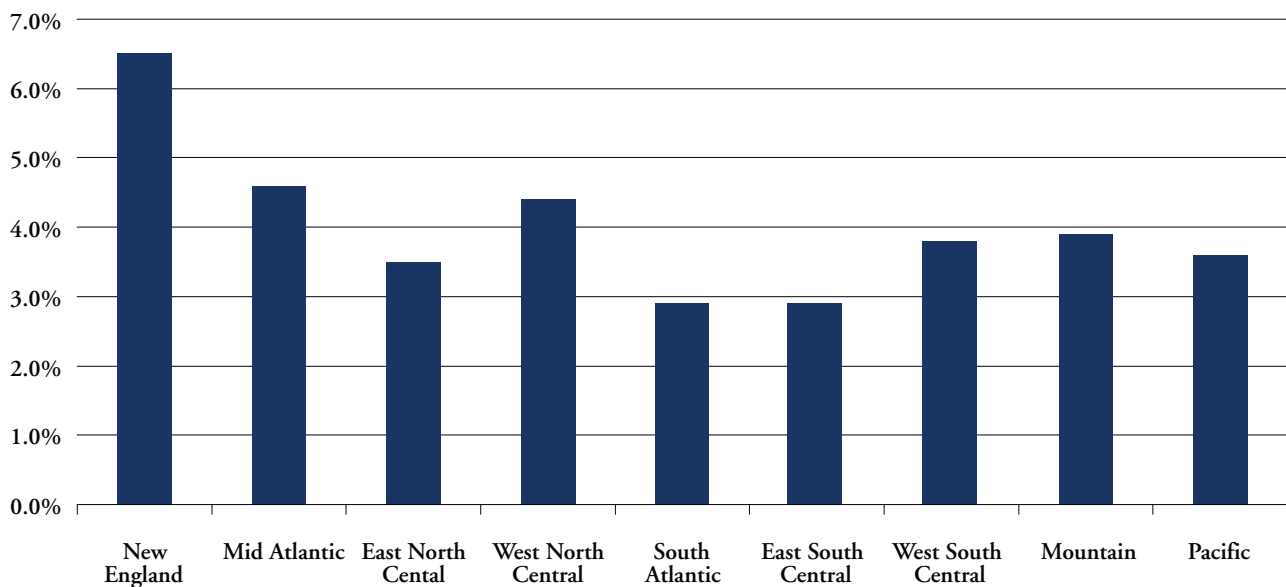
### COST FACTOR DIFFERENCES BY REGION

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As shown in Figure 11, faculty salaries rose most strongly in the New England region, by 6.5 percent, while in the East South Central and South Atlantic regions faculty salaries rose by just 2.9 percent. In the other regions, faculty salary increases were in a range of 3.5 percent to 4.6 percent.

New England showed the sharpest increase in faculty salary inflation from year to year, with the FY2008 rate of 3.1 percent rising to 6.5 percent in FY2009. Some regions saw declines in the rate, notably the East South Central region, where faculty salary inflation declined from 4.7 percent in FY2008 to 2.9 percent in FY2009, and the Pacific region, which exhibited a decline in faculty salary inflation from 6.4 percent in FY2008 to 3.6 percent in FY2009.

FIGURE 11  
FY2009 Faculty Salaries by Region

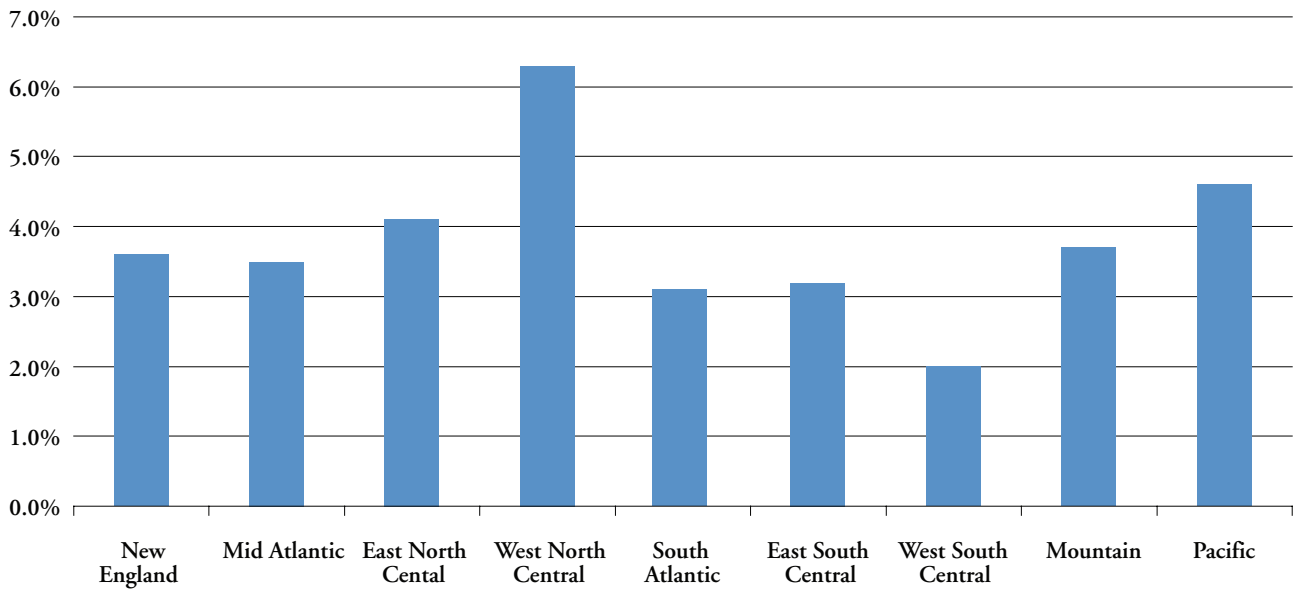




Fringe benefits, analyzed in Figure 12, increased most strongly in the West North Central region, where the FY2009 figure was 6.3 percent. The lowest rate of increase was observed in the West South Central region, where the FY2009 figure was 2.0 percent. In the other regions, fringe benefit inflation ranged from a low of 3.1 percent to a high of 4.6 percent.

The West North Central region showed the sharpest increase in fringe benefit inflation, which tripled from 2.1 percent in FY2008 to 6.3 percent in FY2009. An equally strong proportional decline was observed in the Mountain region, where fringe benefit inflation fell by more than two-thirds, from 12.2 percent in FY2008 to 3.7 percent in FY2009. Strong declines were also recorded in the East South Central region, from 6.9 percent to 3.2 percent, and the West South Central region, from 4.9 percent to 2.0 percent.

FIGURE 12  
FY2009 Fringe Benefits by Region



## LIMITATIONS AND OPPORTUNITIES OF HEPI BY INSTITUTIONAL TYPE AND REGION

In providing HEPI figures and analysis by type of institution and geographical region, it is appropriate to bear in mind the limitations of the methodology employed while also recognizing the potential opportunities for users of these indices to improve their fit with their own institution.

As noted, the institutional and regional HEPI indices are derived by substituting appropriate data for faculty salaries and fringe benefits into the standard HEPI regression equation, while leaving the other six cost factors unchanged. These two categories, which together account for nearly half of the factor weighting in the HEPI equation, are the only ones for which information by institutional type and region is available. Since the other six factors, representing over half the weighting, are not changed, the institutional and regional HEPI indices are of necessity approximations and should be used accordingly.

In deriving the institutional and regional indices, the standard HEPI equation's factor weightings are also left unchanged. This is of relatively little importance in the institutional HEPI, where each category includes schools throughout the nation; in the regional HEPI, however, the weightings are kept the same because there is no standard source of information to serve as a guide to how they might be appropriately adjusted for each region.

For example, in a region where weather patterns are comparatively moderate the weighting assigned to utilities may be too high, while in a region of severe weather it might be appropriate to increase it. Users of the regional HEPI who are confident of the proportional composition of their institution's budgets, as expressed in the eight cost factors, may want to adjust the relative weightings of the factors in order to produce a HEPI that is more appropriate for their own institution.

## PURCHASING POWER AND SALARIES OF FULL-TIME PROFESSORS

As part of the calculation of HEPI, the Commonfund Institute also gathers information about the salaries of fulltime professors at public and private institutions. As illustrated in Tables E and F, these salaries have been restated in constant dollar terms so that they reflect the impact of inflation as measured by CPI.

Table E shows that salaries of professors at public doctoral-level institutions have increased in constant terms over the last 42 years by \$15,869, evidencing an increase in real purchasing power. For public comprehensive institutions, salaries have nearly stagnated in real terms, rising by only \$4,864, while at public two-year colleges they have increased by \$10,170 over the 42-year period.

Table F shows that at private colleges, salaries have kept up with inflation in all categories of institution. Salaries at doctoral-level institutions have led the way with a real increase of nearly \$44,247 over 42 years, while those at comprehensive schools have increased by \$23,081. Salaries at general baccalaureate institutions have increased by approximately \$22,775 over the shorter 32-year period that they have been tracked since 1977.

Comparing public and private institutions, it is apparent that salaries for professors at public doctoral-level and comprehensive institutions have lagged behind those for professors at comparable private institutions. This gap has grown in recent decades. Average salaries for full professors at doctoral-level public institutions, for example, are currently \$115,509 while their counterparts at private institutions make \$151,403 – a gap of nearly \$36,000. This gap, in real terms, was just over \$7,500 in FY1967, indicating that professors at private doctoral-level institutions have benefited by an increase of over \$28,300 in real purchasing power over the intervening decades.

At comprehensive institutions, the relative positions have actually reversed. In FY1967, full professors at public comprehensive institutions made over \$7,000 more than their counterparts at private institutions as measured in current dollars. By FY2009, however, this advantage had been reversed, with professors at comprehensive private institutions making \$11,198 more – a gain over 42 years of nearly \$18,200 in real terms.

TABLE E

HIGHER EDUCATION FACULTY SALARIES IN CURRENT AND CONSTANT FY2009 DOLLARS*									
ILLUSTRATIVE DATA									
<i>Public Faculty Salaries</i>									
Full professor average 9–10 month salaries by type of institution									
Fiscal year	Category I (Doctoral-Level)			Cat IIA (Comprehensive)			Cat III (Two-Year Colleges)		
	Amount	Yearly %	Constant FY09 dollars	Amount	Yearly %	Constant FY09 dollars	Amount	Yearly %	Constant FY09 dollars
1967	\$15,273	–	\$99,640	\$12,798	–	\$83,493	\$9,927	–	\$64,763
1968	\$16,160	5.8%	\$102,059	\$13,747	7.4%	\$86,819	\$10,659	7.4%	\$67,317
1969	\$16,900	4.6%	\$101,805	\$14,550	5.8%	\$87,648	\$11,800	10.7%	\$71,083
1970	\$17,750	5.0%	\$100,959	\$15,400	5.8%	\$87,592	\$12,950	9.7%	\$73,657
1971	\$18,600	4.8%	\$100,535	\$16,350	6.2%	\$88,373	\$14,150	9.3%	\$76,482
1972	\$19,678	5.8%	\$102,620	\$17,313	5.9%	\$90,287	\$15,217	7.5%	\$79,356
1973	\$20,545	4.4%	\$103,103	\$18,446	6.5%	\$92,570	\$17,080	12.2%	\$85,714
1974	\$21,400	4.2%	\$98,596	\$19,600	6.3%	\$90,303	\$18,100	6.0%	\$83,392
1975	\$22,648	5.8%	\$93,872	\$20,840	6.3%	\$86,378	\$19,312	6.7%	\$80,045
1976	\$24,277	7.2%	\$93,995	\$22,067	5.9%	\$85,438	\$20,254	4.9%	\$78,419
1977	\$25,210	3.8%	\$92,242	\$23,190	5.1%	\$84,851	\$21,860	7.9%	\$79,985
1978	\$26,420	4.8%	\$90,574	\$24,290	4.7%	\$83,272	\$23,240	6.3%	\$79,672
1979	\$28,000	6.0%	\$87,780	\$25,030	3.0%	\$78,469	\$23,420	0.8%	\$73,422
1980	\$30,120	7.6%	\$83,298	\$27,200	8.7%	\$75,223	\$25,190	7.6%	\$69,664
1981	\$32,850	9.1%	\$81,456	\$29,580	8.8%	\$73,348	\$26,200	4.0%	\$64,967
1982	\$35,680	8.6%	\$81,418	\$31,700	7.2%	\$72,336	\$27,720	5.8%	\$63,254
1983	\$38,180	7.0%	\$83,501	\$33,490	5.6%	\$73,244	\$30,480	10.0%	\$66,661
1984	\$39,770	4.2%	\$83,912	\$34,560	3.2%	\$72,920	\$31,510	3.4%	\$66,484
1985	\$42,560	7.0%	\$86,417	\$37,090	7.3%	\$75,311	\$33,230	5.5%	\$67,473
1986	\$45,560	7.0%	\$89,906	\$39,720	7.1%	\$78,382	\$34,870	4.9%	\$68,811
1987	\$48,740	7.0%	\$94,083	\$42,290	6.5%	\$81,633	\$37,460	7.4%	\$72,309
1988	\$51,080	4.8%	\$94,673	\$46,060	8.9%	\$85,369	\$38,230	2.1%	\$70,856
1989	\$54,240	6.2%	\$96,053	\$46,920	1.9%	\$83,090	\$41,200	7.8%	\$72,960
1990	\$57,520	6.0%	\$97,217	\$49,610	5.7%	\$83,848	\$43,000	4.4%	\$72,676
1991	\$60,450	5.1%	\$96,926	\$52,190	5.2%	\$83,681	\$45,050	4.8%	\$72,233
1992	\$61,950	2.5%	\$96,227	\$53,750	3.0%	\$83,490	\$47,700	5.9%	\$74,092
1993	\$63,250	2.1%	\$95,269	\$54,240	0.9%	\$81,698	\$47,820	0.3%	\$72,028
1994	\$64,860	2.5%	\$95,330	\$55,690	2.7%	\$81,852	\$49,120	2.7%	\$72,196
1995	\$67,560	4.2%	\$96,447	\$57,090	2.5%	\$81,500	\$51,490	4.8%	\$73,506
1996	\$69,750	3.2%	\$96,916	\$58,520	2.5%	\$81,312	\$51,560	0.1%	\$71,641
1997	\$72,220	3.5%	\$97,559	\$60,481	3.4%	\$81,701	\$52,752	2.3%	\$71,260
1998	\$75,154	4.1%	\$99,736	\$61,839	2.2%	\$82,066	\$53,024	0.5%	\$70,367
1999	\$79,284	5.5%	\$103,459	\$63,817	3.2%	\$83,276	\$55,326	4.3%	\$72,196
2000	\$82,535	4.1%	\$104,642	\$66,657	4.5%	\$84,511	\$57,089	3.2%	\$72,380
2001	\$84,007	1.8%	\$102,986	\$68,828	3.3%	\$84,377	\$57,932	1.5%	\$71,020
2002	\$89,631	6.7%	\$107,974	\$72,770	5.7%	\$87,662	\$60,997	5.3%	\$73,480
2003	\$92,387	3.1%	\$108,900	\$74,545	2.4%	\$87,869	\$65,730	7.8%	\$77,478
2004	\$94,606	2.4%	\$109,129	\$74,872	0.4%	\$86,365	\$64,439	-2.0%	\$74,331
2005	\$97,948	3.5%	\$109,683	\$76,665	2.4%	\$85,850	\$66,405	3.1%	\$74,361
2006	\$101,620	3.7%	\$109,620	\$78,884	2.9%	\$85,094	\$66,011	-0.6%	\$71,208
2007	\$106,495	4.8%	\$111,983	\$81,855	3.8%	\$86,073	\$68,424	3.7%	\$71,950
2008	\$111,807	5.0%	\$113,368	\$85,642	4.6%	\$86,838	\$71,936	5.1%	\$72,940
2009	\$115,509	3.3%	\$115,509	\$88,357	3.2%	\$88,357	\$74,933	4.2%	\$74,933

\*Constant dollars based on inflation measured by the Consumer Price Index.  
Sources: FY1967–FY1976, NCES; FY1977–present, AAUP

TABLE F

## HIGHER EDUCATION FACULTY SALARIES IN CURRENT AND CONSTANT FY2009 DOLLARS\*

## ILLUSTRATIVE DATA

## Private Faculty Salaries

## Full professor average 9–10 month salaries by type of institution

Fiscal year	Category I (Doctoral-Level)			Cat IIA (Comprehensive)			Cat III (Two-Year Colleges)		
	Amount	Yearly %	Constant FY09 dollars	Amount	Yearly %	Constant FY09 dollars	Amount	Yearly %	Constant FY09 dollars
1967	\$16,425	–	\$107,156	\$11,722	–	\$76,474			
1968	\$17,057	3.8%	\$107,724	\$12,572	7.3%	\$79,399			
1969	\$18,050	5.8%	\$108,732	\$13,250	5.4%	\$79,817			
1970	\$18,950	5.0%	\$107,784	\$14,100	6.4%	\$80,198			
1971	\$19,800	4.5%	\$107,021	\$14,950	6.0%	\$80,806			
1972	\$20,775	4.9%	\$108,341	\$15,899	6.3%	\$82,913			
1973	\$21,507	3.5%	\$107,931	\$16,501	3.8%	\$82,809			
1974	\$22,600	5.1%	\$104,125	\$17,200	4.2%	\$79,246			
1975	\$23,832	5.5%	\$98,779	\$18,047	4.9%	\$74,801			
1976	\$25,368	6.4%	\$98,219	\$19,153	6.1%	\$74,156			
1977	\$27,810	9.6%	\$101,756	\$22,020	15.0%	\$80,570	\$20,780		\$76,033
1978	\$28,880	3.8%	\$99,007	\$23,380	6.2%	\$80,152	\$21,790	4.9%	\$74,701
1979	\$31,090	7.7%	\$97,467	\$24,830	6.2%	\$77,842	\$23,230	6.6%	\$72,826
1980	\$33,400	7.4%	\$92,369	\$26,160	5.4%	\$72,347	\$24,740	6.5%	\$68,420
1981	\$36,000	7.8%	\$89,267	\$28,710	9.7%	\$71,190	\$27,030	9.3%	\$67,025
1982	\$40,220	11.7%	\$91,778	\$31,530	9.8%	\$71,948	\$29,720	10.0%	\$67,818
1983	\$43,950	9.3%	\$96,120	\$33,750	7.0%	\$73,813	\$32,410	9.1%	\$70,882
1984	\$47,070	7.1%	\$99,315	\$36,000	6.7%	\$75,958	\$34,140	5.3%	\$72,033
1985	\$49,880	6.0%	\$101,280	\$37,980	5.5%	\$77,118	\$36,500	6.9%	\$74,113
1986	\$53,190	6.6%	\$104,963	\$40,170	5.8%	\$79,270	\$38,200	4.7%	\$75,382
1987	\$56,900	7.0%	\$109,834	\$42,680	6.2%	\$82,385	\$40,460	5.9%	\$78,100
1988	\$59,850	5.2%	\$110,927	\$44,010	3.1%	\$81,569	\$42,540	5.1%	\$78,845
1989	\$64,290	7.4%	\$113,850	\$47,010	6.8%	\$83,249	\$44,770	5.2%	\$79,282
1990	\$68,360	6.3%	\$115,538	\$51,000	8.5%	\$86,197	\$46,830	4.6%	\$79,149
1991	\$72,950	6.7%	\$116,968	\$52,820	3.6%	\$84,692	\$49,610	5.9%	\$79,545
1992	\$76,890	5.4%	\$119,433	\$54,980	4.1%	\$85,400	\$52,230	5.3%	\$81,129
1993	\$80,280	4.4%	\$120,920	\$57,060	3.8%	\$85,945	\$54,620	4.6%	\$82,270
1994	\$82,520	2.8%	\$121,287	\$59,610	4.5%	\$87,614	\$56,780	4.0%	\$83,454
1995	\$84,790	2.8%	\$121,044	\$60,830	2.0%	\$86,839	\$58,040	2.2%	\$82,856
1996	\$88,050	3.8%	\$122,344	\$63,430	4.3%	\$88,135	\$59,830	3.1%	\$83,132
1997	\$92,112	4.6%	\$124,430	\$64,468	1.6%	\$87,087	\$62,047	3.7%	\$83,817
1998	\$95,023	3.2%	\$126,104	\$67,282	4.4%	\$89,289	\$64,784	4.4%	\$85,974
1999	\$98,606	3.8%	\$128,672	\$69,509	3.3%	\$90,703	\$67,180	3.7%	\$87,664
2000	\$103,761	5.2%	\$131,553	\$71,547	2.9%	\$90,711	\$70,528	5.0%	\$89,419
2001	\$107,633	3.7%	\$131,949	\$75,143	5.0%	\$92,119	\$74,031	5.0%	\$90,756
2002	\$112,534	4.6%	\$135,564	\$77,310	2.9%	\$93,131	\$76,692	3.6%	\$92,387
2003	\$118,269	5.1%	\$139,408	\$80,011	3.5%	\$94,312	\$79,928	4.2%	\$94,214
2004	\$122,158	3.3%	\$140,910	\$81,570	1.9%	\$94,091	\$82,344	3.0%	\$94,984
2005	\$127,214	4.1%	\$142,455	\$83,986	3.0%	\$94,048	\$85,575	3.9%	\$95,828
2006	\$131,292	3.2%	\$141,628	\$88,800	5.7%	\$95,791	\$87,779	2.6%	\$94,690
2007	\$136,689	4.1%	\$143,733	\$91,197	2.7%	\$95,897	\$90,353	2.9%	\$95,009
2008	\$144,428	5.7%	\$146,444	\$95,114	4.3%	\$96,442	\$94,139	4.2%	\$95,453
2009	\$151,403	4.8%	\$151,403	\$99,555	4.7%	\$99,555	\$98,808	5.0%	\$98,808

\*Constant dollars based on inflation measured by the Consumer Price Index.

Sources: FY1967–FY1976, NCES; FY1977–present, AAUP

## THE HEPI ADVISORY BOARD

Commonfund Institute has formed an Advisory Board of representatives from colleges and universities and the broader higher education community to advise it on matters related to management of the HEPI and determine potential future enhancements. Commonfund Institute thanks the board and its individual members for their expertise and counsel.

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