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Commonfund Higher Education Price Index

2023 Update

Welcome

This year, some of the biggest questions facing higher education are in the process of being answered – will inflation continue to make headlines, and how will institutions respond, especially as high interest rates and market volatility persist? Price increases lingered longer than some anticipated throughout the real economy, impacting students, households, and institutional budgets. Despite many bumps in the road, we've seen incredible resilience in the face of an aggressive interest rate raising regime in the form of economic growth and low unemployment rates.

How these dynamics will play out in terms of student enrollment, programmatic innovation, and fundraising are ongoing questions for Trustees and senior staff at institutions of higher education. Commonfund understands the importance of having high-quality and relevant data inputs to anchor good governance and decision making for the long term. That's why Commonfund's annual Higher Education Price Index (HEPI) isolates costs most relevant to the operation of higher ed.

As this year's report shows, costs for a market basket of items making up those operating budgets increased at an annual rate of 4.0 percent in FY2023 compared with 5.2 percent in FY2022 (and 2.7 percent in FY2021). Inflation is easing, but for higher education institutions, it is still well above the prior decade's norm. We anticipate this will be an ongoing subject of attention alongside other high priority agenda topics.

George Suttles
Executive Director
Commonfund Institute

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About Commonfund Institute

Commonfund Institute is among the nation's most trusted sources for relevant, useful, and proprietary data, analytics, and best practices in financial management. The Institute provides a wide variety of resources, including conferences, seminars, roundtables, and online learning through Commonfund Institute Online. Insights cover topics such as endowments and governance; proprietary and third-party research such as the Commonfund Benchmark Studies®; publications including the Commonfund Higher Education Price Index® (HEPI); and events such as the annual Commonfund Forum and Investment Stewardship Academy.

Higher Education Price Index Introduction

Executive Summary

Commonfund Higher Education Price Index® (HEPI) data show that costs for colleges and universities rose 4.0 percent in FY2023, a decreased rate of inflation compared with 5.2 percent in FY2022 and up from 2.7 percent in FY2021. (FY2023 covers the period from July 1, 2022, to June 30, 2023, and coincides with the budget year of most institutions of higher education.)

This year is a welcome reprieve from the FY2022 rate of 5.2 percent, which had been the highest since the 6.0 percent rise in FY2001. The lowest annual rate, an increase of 0.9 percent, occurred in FY2010. That year marked the beginning of a decade when annual increases in HEPI averaged less than 2.2 percent. By contrast, HEPI increased nearly 3.5 percent on average since FY2020.

Year over year, inflation of costs for higher education institutions declined in four of the eight components tracked by HEPI in FY2023, with the most pronounced decreases in two components: utilities and supplies and materials – the same two categories that increased most dramatically in last year's analysis. The highly volatile utilities category saw deflation of -3.7 percent year over year, while supplies and materials fell to 7.3 percent. Smaller decreases came in service employee costs, which fell to 6.4 percent, and in clerical costs, to 5.0 percent. Faculty and administrative salaries rose to 4.0 percent and 4.1 percent, respectively, as did fringe benefits (2.8 percent) and miscellaneous services (4.9 percent).

Comparing HEPI and the Consumer Price Index[1] (CPI), while the former showed costs rising 4.0 percent in FY2023, costs rose in the latter by 6.3 percent. This is the second year in a row (and the second time since FY2013) that the CPI exceeded HEPI. Historically, the annual rate of increase in HEPI typically exceeds that of the CPI. For instance, since FY2000, HEPI has increased at a higher annual rate than the CPI 79 percent of the time.

About HEPI

The Higher Education Price Index (HEPI) is an inflation index designed specifically for use by institutions of higher education. 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 more than 60 continuous years of higher education inflation data. It is an essential tool used by 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 subsequent years, in keeping with its commitment to improving and expanding the index, Commonfund Institute has expanded HEPI to include additional calculations and measures.

HEPI is compiled using data items from publicly available sources (see page 27 for more details) that are released at different points in the academic fiscal year, which runs from July 1 through the following June 30. We use this data, as it is released, to calculate HEPI forecasts that are released each April, June and September. The final report is released in December each year.

1 The Bureau of Labor Statistics (BLS) updates CPI statistics monthly. It also provides a six- and 12-month average change; January-June, July-December and January-December. The CPI values reported on Commonfund's HEPI web site are based on fiscal year (July 1 through June 30) 12-month averages rather than the monthly (or point-to-point) CPI values usually reported by the BLS.

HEPI data are provided free of charge via Commonfund's website at www.commonfund.org/HEPI, where you can sign up to receive quarterly forecasts and the full HEPI report when it is published each December.

The HEPI Tables

The chart below shows HEPI from fiscal years 1961 to 2023. 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. HEPI data beginning with FY2002 have been restated to reflect methodological improvements adopted in 2009.

FIGURE 1

HIGHER EDUCATION PRICE INDEX

1961-2023

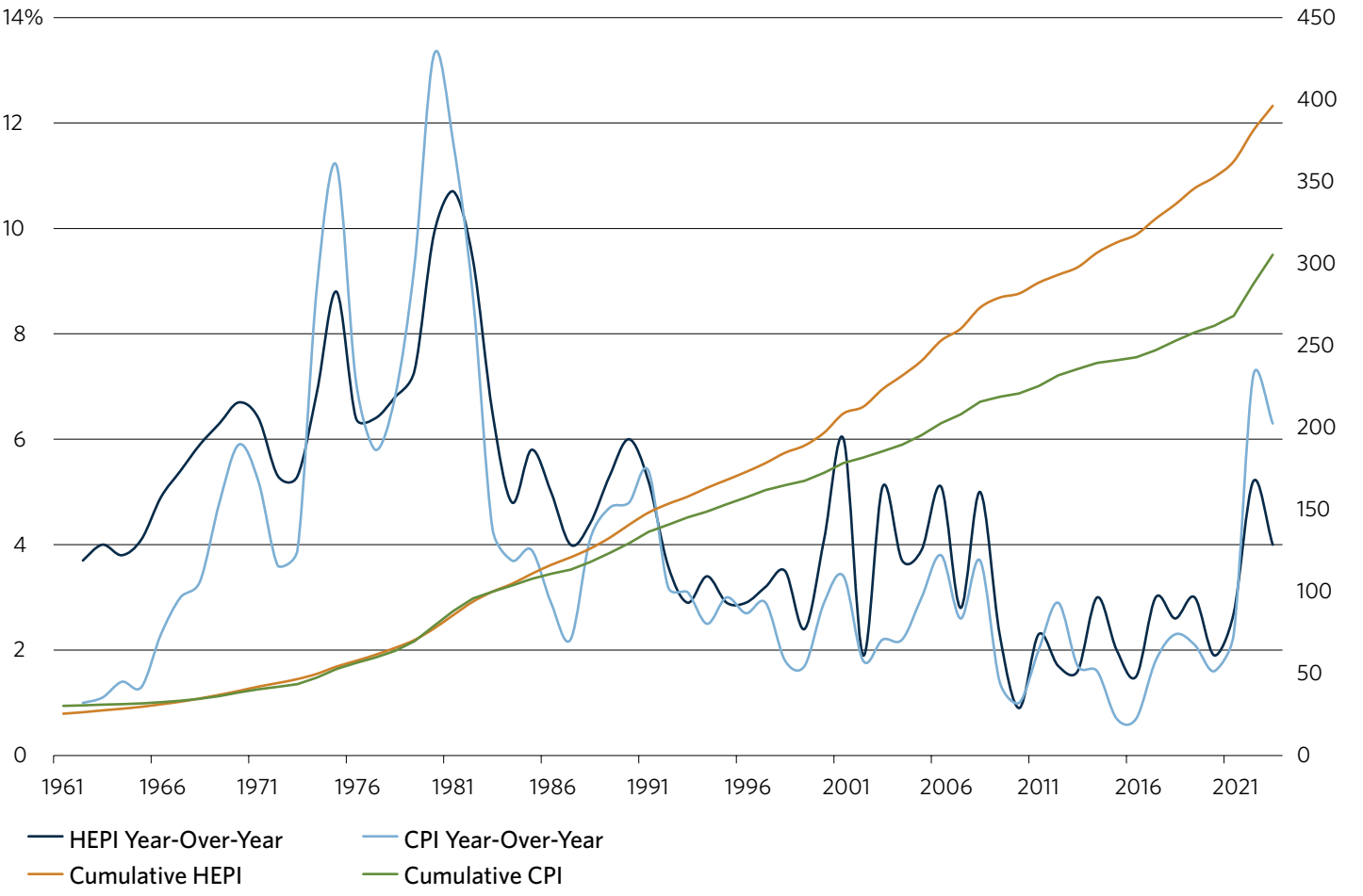


Figure 1 traces the Higher Education Price Index (HEPI) and the Consumer Price Index (CPI) from 1961 to 2023. Cumulative HEPI is represented by the steadily increasing orange line, indexed to 100 for 1983, and should be read using the right-hand scale. The jagged lines trace percentage year-over-year changes in HEPI and CPI and should be read using the left-hand scale. In this chart and in the supporting data in Table A on page 3, HEPI and CPI are 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 in 2009.

TABLE A

HISTORICAL SUMMARY OF HIGHER EDUCATION PRICE INDEX AND CONSUMER PRICE INDEX

Fiscal Years 1961 to 2023

	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	–	1991	148.2	5.2%	136.4	5.4%
1962	26.5	3.7%	30.6	1.0%	1992	153.5	3.6%	140.8	3.2%
1963	27.6	4.0%	31.0	1.1%	1993	157.9	2.9%	145.2	3.1%
1964	28.6	3.8%	31.4	1.4%	1994	163.3	3.4%	148.8	2.5%
1965	29.8	4.1%	31.8	1.3%	1995	168.1	2.9%	153.2	3.0%
1966	31.3	4.9%	32.6	2.3%	1996	173.0	2.9%	157.4	2.7%
1967	32.9	5.4%	33.5	3.0%	1997	178.4	3.2%	161.9	2.9%
1968	34.9	5.9%	34.6	3.3%	1998	184.7	3.5%	164.8	1.8%
1969	37.1	6.3%	36.3	4.8%	1999	189.1	2.4%	167.6	1.7%
1970	39.5	6.7%	38.5	5.9%	2000	196.9	4.1%	172.5	2.9%
1971	42.1	6.4%	40.5	5.2%	2001	208.7	6.0%	178.4	3.4%
1972	44.3	5.3%	41.9	3.6%	2002	212.7	1.9%	181.6	1.8%
1973	46.7	5.3%	43.6	3.9%	2003	223.5	5.1%	185.5	2.2%
1974	49.9	6.9%	47.5	8.9%	2004	231.7	3.7%	189.6	2.2%
1975	54.3	8.8%	52.8	11.2%	2005	240.8	3.9%	195.3	3.0%
1976	57.8	6.4%	56.5	7.1%	2006	253.1	5.1%	202.7	3.8%
1977	61.5	6.4%	59.8	5.8%	2007	260.3	2.8%	208.0	2.6%
1978	65.7	6.8%	63.8	6.8%	2008	273.2	5.0%	215.7	3.7%
1979	70.5	7.3%	69.8	9.3%	2009	279.3	2.3%	218.7	1.4%
1980	77.5	9.9%	79.1	13.3%	2010	281.8	0.9%	220.8	1.0%
1981	85.8	10.7%	88.2	11.6%	2011	288.4	2.3%	225.3	2.0%
1982	93.9	9.4%	95.8	8.7%	2012	293.2	1.7%	231.9	2.9%
1983	100.0	6.5%	100.0	4.3%	2013	297.8	1.6%	235.7	1.7%
1984	104.8	4.8%	103.7	3.7%	2014	306.7	3.0%	239.4	1.6%
1985	110.8	5.8%	107.7	3.9%	2015	312.9	2.0%	241.1	0.7%
1986	116.3	5.0%	110.8	2.9%	2016	317.7	1.5%	242.8	0.7%
1987	120.9	4.0%	113.3	2.2%	2017	327.4	3.0%	247.2	1.8%
1988	126.2	4.4%	118.0	4.1%	2018	336.1	2.6%	252.8	2.3%
1989	132.8	5.3%	123.5	4.7%	2019	346.0	3.0%	258.0	2.1%
1990	140.8	6.0%	129.4	4.8%	2020	352.7	1.9%	262.2	1.6%
					2021	362.3	2.7%	268.1	2.3%
					2022	381.1	5.2%	287.3	7.2%
					2023	396.2	4.0%	305.3	6.3%

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

IMPORTANT NOTE: In 2015, the American Association of University Professors (AAUP) began using a new methodology to calculate salary and total compensation that was not directly comparable with the past. Further adjustments were made to the data for FY2022 and data for fiscal years 2015 through 2022 have now been restated to account for the change and to make the data compatible with past reporting. As of FY2023 and moving forward, HEPI incorporates an amended materials category due to expiration of collection for one of its many components, with no material change on the category outcomes when mapped to prior years.

TABLE B

HIGHER EDUCATION PRICE INDEX COMPONENTS ANALYSIS

Fiscal Years 2014 to 2023

	Fiscal	Regression HEPI	Faculty salaries	Admin-istrative salaries	Clerical	Service employees	Fringe benefits	Miscel-laneous services	Supplies and materials	Utilities
Index Value	2014	306.7	301.0	366.4	274.8	242.0	458.3	274.2	200.2	211.4
	2015	312.9	306.4	381.9	280.4	248.4	484.0	279.8	190.7	183.5
	2016	317.7	318.2	393.3	289.1	253.3	487.9	285.7	179.5	146.5
	2017	327.4	326.0	405.2	297.3	262.7	501.6	290.7	180.1	167.8
	2018	336.1	333.6	414.1	305.9	271.6	516.3	297.8	187.9	170.7
	2019	346.0	342.2	424.1	316.6	282.5	534.1	304.8	195.6	172.3
	2020	352.7	351.4	430.3	326.6	293.9	549.6	313.2	188.8	145.3
	2021	362.3	354.7	437.2	335.7	306.6	572.2	319.3	195.4	167.0
	2022	381.1	362.1	449.8	353.2	332.9	587.3	332.9	237.5	239.0
	2023	396.2	376.8	468.1	370.7	354.2	603.6	349.2	257.3	230.1
Standard Deviation	2002-2023	50.8	46.0	67.8	46.6	44.7	98.0	40.3	30.8	35.5
Yearly% change	2014	3.0%	2.2%	1.1%	1.9%	1.1%	4.8%	1.8%	11.2%	8.1%
	2015	2.0%	1.8%	4.2%	2.1%	2.6%	5.6%	2.1%	-4.8%	-13.2%
	2016	1.5%	3.8%	3.0%	3.1%	2.0%	0.8%	2.1%	-5.8%	-20.2%
	2017	3.0%	2.5%	3.0%	2.8%	3.7%	2.8%	1.7%	0.3%	14.5%
	2018	2.6%	2.3%	2.2%	2.9%	3.4%	2.9%	2.4%	4.3%	1.7%
	2019	3.0%	2.6%	2.4%	3.5%	4.0%	3.5%	2.4%	4.1%	0.9%
	2020	1.9%	2.7%	1.5%	3.2%	4.0%	2.9%	2.8%	-3.5%	-15.7%
	2021	2.7%	1.0%	1.6%	2.8%	4.3%	4.1%	2.0%	3.5%	15.0%
	2022	5.2%	2.1%	2.9%	5.2%	8.6%	2.6%	4.3%	21.5%	43.1%
	2023	4.0%	4.0%	4.1%	5.0%	6.4%	2.8%	4.9%	7.3%	-3.7%

IMPORTANT NOTE: In 2015, the American Association of University Professors (AAUP) began using a new methodology to calculate salary and total compensation that was not directly comparable with the past. Further adjustments were made to the data for FY2022 and data for fiscal years 2015 through 2022 have now been restated to account for the change and to make the data compatible with past reporting. As of FY2023 and moving forward, HEPI incorporates an amended materials category due to expiration of collection for one of its many components, with no material change on the category outcomes when mapped to prior years.

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
Admin	0.104289477
Clerical	0.18408585
Service	0.082314791
Fringe	0.131020859
Services	0.022899544
Supplies	0.055138426
Utilities	0.068247106

Higher Education Price Index Analysis

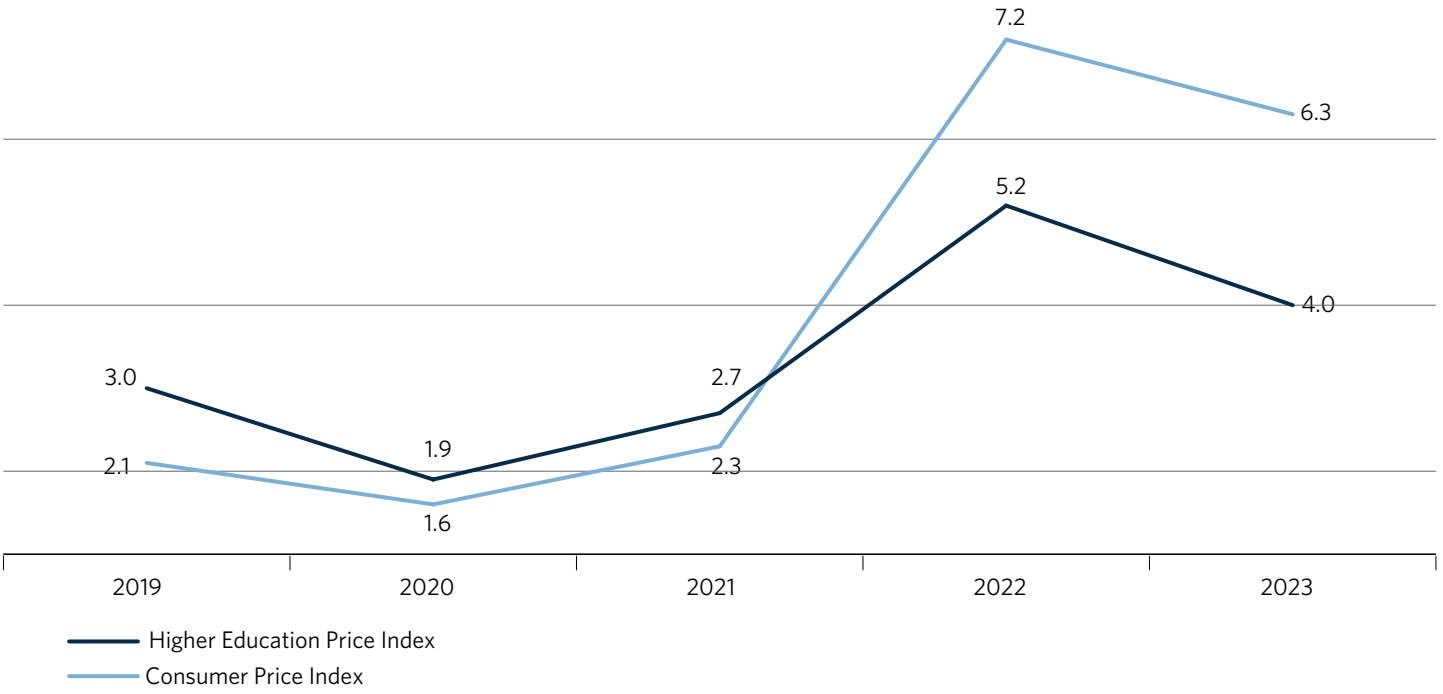
HEPI for 2023

For fiscal year 2023, the HEPI calculation shows that inflation for colleges and universities was 4.0 percent, a 24 percent decrease from FY2022's 5.2 percent, but still more than double FY2020's 1.9 percent. The HEPI inflation figure for FY2023 was above the average of 3.1 percent for the preceding five years (FY2018—FY2022), despite last year's spike. Whether this second year in a row of higher inflation indicates a new era of sustained price changes, or a step toward reverting to the mean, is yet to be determined. Costs across the entire domestic economy continued to climb, as the Consumer Price Index (CPI) increased 6.3 percent on average throughout the fiscal year, down from last year's 7.2 percent. *Note: the CPI values reported by Commonfund for HEPI are based on fiscal year (July 1 through June 30) 12-month averages rather than the monthly (or point-to-point) CPI values usually reported by the Bureau of Labor Statistics.*

FIGURE 2

THE HIGHER EDUCATION PRICE INDEX VERSUS THE CONSUMER PRICE INDEX

Fiscal years 2019 - 2023 | Numbers in percent



- There are eight cost factor components that contribute to the HEPI regression calculation: faculty salaries, administrative salaries, clerical costs, service employee costs, 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 salaries, clerical costs, fringe benefits and administrative salaries.

Highlights of the FY2023 Study

Inflation rates increased in four of the eight components tracked by HEPI in FY2023. Faculty salaries, the most heavily weighted component in the index, increased 4.0 percent in FY2023 – nearly twice the 2.1 percent increase in FY2022 and the highest rate since FY2008. The biggest drivers of FY2022 HEPI increases – supplies and materials, and utilities – fell significantly from prior-year highs to 7.3 percent and -3.7 percent, respectively. Clerical costs, the second most heavily weighted category, rose 5.0 percent in FY2023, down from 5.2 percent in FY2022, but still well above FY2021's rate of 2.8 percent.

Supporting Data

Fringe benefits, the third most heavily weighted component, rose 2.8 percent in FY2023, slightly above the FY2022 rate of 2.6 percent, but below FY2021's rate of 4.1 percent. The fourth most heavily weighted component, administrative salaries, rose by 4.1 percent in FY2023 compared with FY2022's pace of 2.9 percent. Lower-weighted components had high inflation rates in FY2023 relative to other components, including supplies and materials costs (7.3 percent), service employee costs (6.4 percent), and miscellaneous service costs (4.9 percent).

5-Year Changes in Cost Factors: Figure 3 Analysis

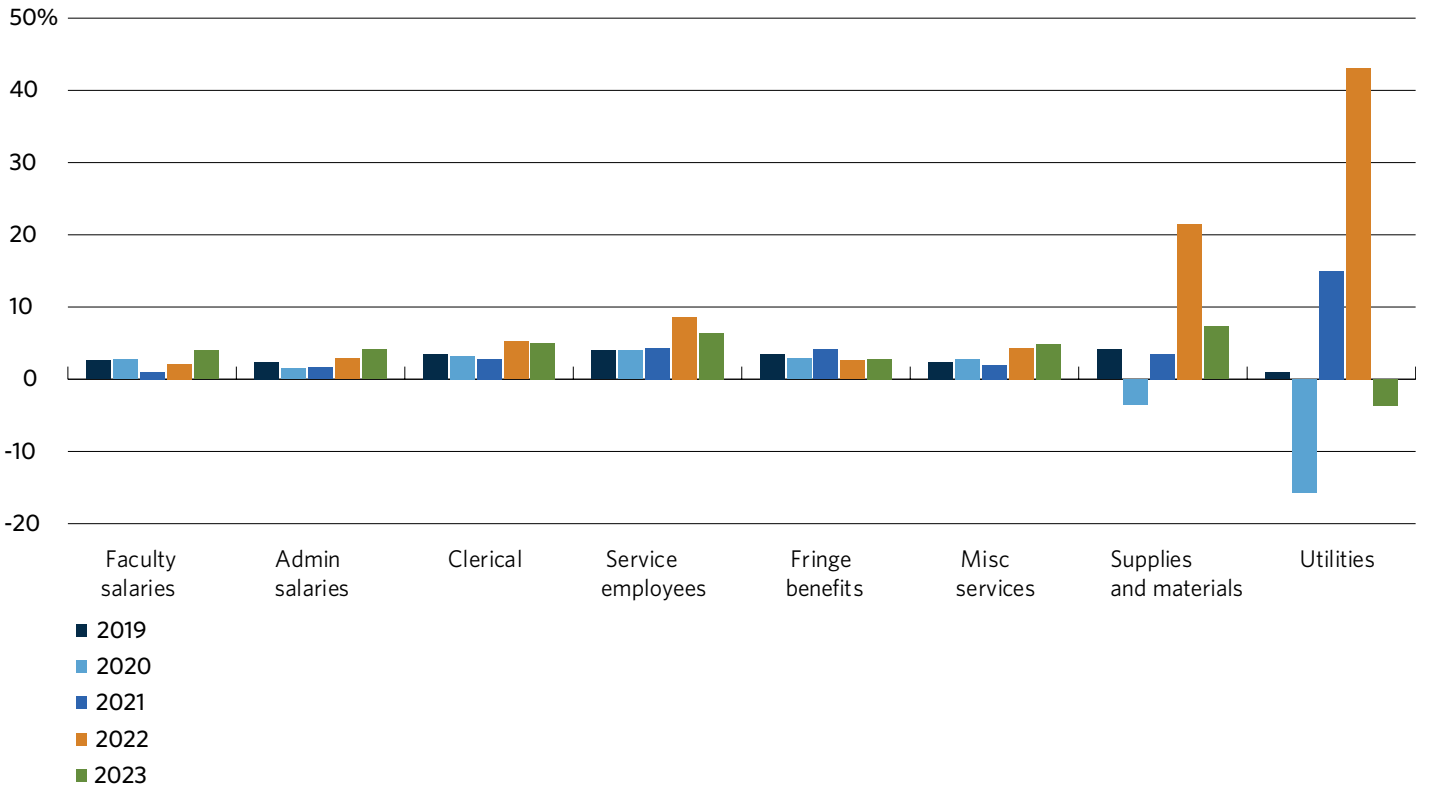
Figure 3 is a graphical representation of the changes in the eight cost factors from FY2019 to FY2023. Six cost factors have remained reasonably stable over the period, aside from significant jumps to service employee and clerical costs in FY2022. Considerable volatility continues to be seen in supplies and materials and utilities. The most dramatic year-over-year changes occurred in utilities, which fell by 46.8 percentage points from FY2022 to FY2023—the largest one-year change in any category since FY2003 (when utilities went from -30.5 percent in FY2002 to 33.5 percent). Utilities prices rose or fell at double-digit rates in three of the past five years—deflating 15.7 percent in FY2020 before inflating 15.0 percent in FY2021, then soaring 43.1 percent in FY2022 before deflating 3.7 percent in FY2023.

Supplies and materials also saw soaring price changes in FY2022 rising by 21.5 percent, before falling to 7.3 percent in FY2023, which is still more than double the FY2021 rate. This 14-percentage point move was the largest decline in the category since FY2015.

FIGURE 3

ANNUAL PERCENTAGE CHANGES IN THE 8 HEPI COST FACTORS

Fiscal Years 2019 – 2023



HEPI for FY2023 versus a 5-Year Average: Figure 4 Analysis

Figure 4 shows a longer-term analysis of HEPI's components, comparing the reported rates for FY2023 against their historical 5-year averages. Of the eight cost factors, six were above their 5-year average in FY2023 and two were lower.

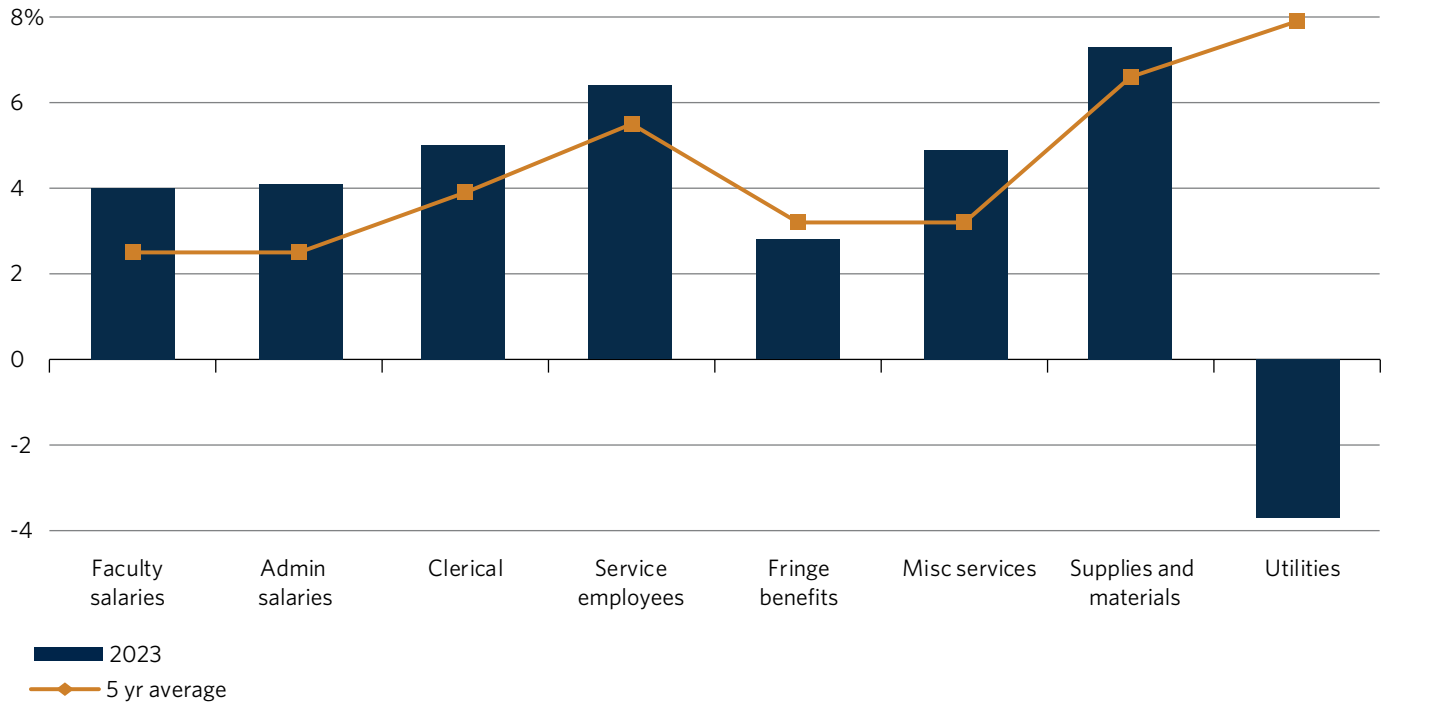
- Cost increases in FY2023 were above their 5-year average for three of the four most heavily weighted HEPI components. Despite FY2022 inflation, FY2023 HEPI increases surpassed 5-year averages in the faculty salary component (4.0 percent versus 2.5 percent, respectively), in administrative salaries (4.1 percent versus 2.5 percent, respectively), and in clerical costs (5.0 percent versus 3.9 percent, respectively). Fringe benefit costs, the third highest weighted component, fell below the 5-year average, rising 2.8 percent in FY2023 compared with a 3.2 percent 5-year average.

- As was true for the previous three years, the greatest deviation from the 5-year average was in the utilities component which fell -3.7 percent in FY2023, compared with its 5-year average of 7.9 percent. The other largest deviations between 1-year and 5-year averages were in faculty and administrative salaries and in miscellaneous services, each of which deviated from their 5-year averages by 1.6 or 1.7 percentage points.

- The other four components – clerical costs, service employees, fringe benefits, and supplies and materials – all deviated by 1 percentage point or less from their 5-year averages. Supplies and materials have increased 6.6 percent on average for the past five years, matching closely with the 7.3 percent FY2023 increase.

FIGURE 4

ANNUAL PERCENTAGE CHANGES IN THE 8 HEPI COST FACTORS VS. 5-YEAR AVERAGE



The highest-ranking categories in terms of 5-year average HEPI increases, were unchanged. From highest to lowest, utilities, supplies and materials, and service employee costs ranked numbers one, two and three for the second straight year. Clerical costs, fringe benefits, miscellaneous services, followed in the mid-range. Faculty and administrative salaries were again at the bottom, each edging up to 2.5 percent for their 5-year average increases. The highest 5-year average of 7.9 percent was for utilities, the only factor that deflated in FY2023 (-3.7 percent). The lowest 5-year averages – for faculty and administrative salaries – have reached their highest 1-year inflation rates since 2008 and 2015, respectively.

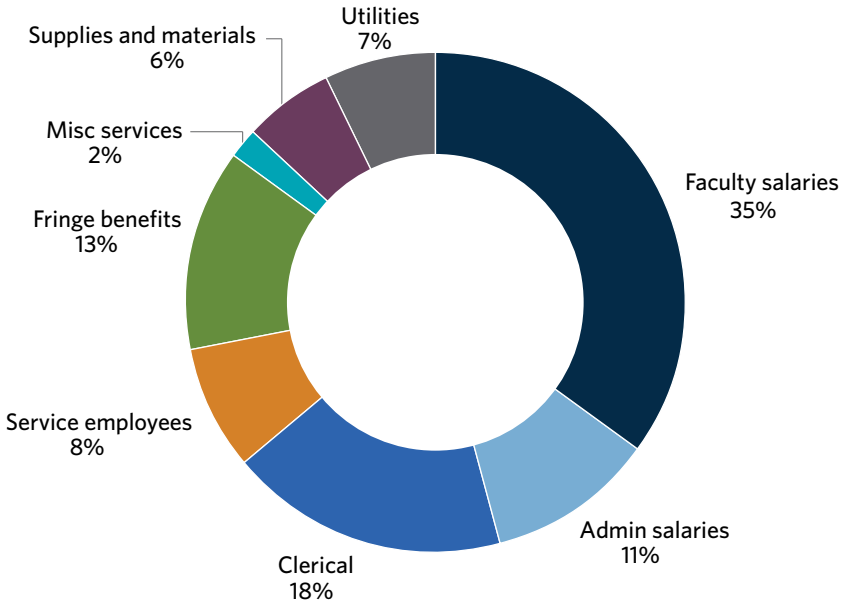
Sensitivity Analysis of the 8 HEPI Regression Components: Figure 5 Analysis

Figure 5 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 33 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 salaries, clerical costs and fringe benefits.
- Utilities represent the third lowest weighting and supplies and materials the second lowest. The low weightings of these two components have served to mitigate the effect of the high volatility that has characterized these cost factors in recent years.

FIGURE 5

HEPI COST FACTOR WEIGHTINGS



Sensitivity of HEPI to a 5 Percent Increase in Faculty Salaries or Miscellaneous Services: Figure 6 Analysis

The sensitivity analysis in Figure 6 shows that a 5 percent increase in faculty salaries, the largest component of HEPI, from an index value of 376.8 to 395.6, has the effect of increasing HEPI by 170 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 6

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 & mat'l	Utilities
Current									
Index Value	396.2	376.8	468.1	370.7	354.2	603.6	349.2	257.3	230.1
Yearly % Change	4.0%	4.0%	4.1%	5.0%	6.4%	2.8%	4.9%	7.3%	-3.7%
Scenario: Faculty Salaries up 5%									
Index Value	402.9	395.6	468.1	370.7	354.2	603.6	349.2	257.3	230.1
Yearly % Change	5.7%	9.2%	4.1%	5.0%	6.4%	2.8%	4.9%	7.3%	-3.7%
△	**170 b.p.**	**520 b.p.**							
Scenario: Misc. Services up 5%									
Index Value	396.6	376.8	468.1	370.7	354.2	603.6	366.7	257.3	230.1
Yearly % Change	4.1%	4.0%	4.1%	5.0%	6.4%	2.8%	10.1%	7.3%	-3.7%
△	**10 b.p.**						**520 b.p.**		

Higher Education Price Index for Different Types of Educational Institutions

Beginning in FY2007 Commonfund expanded the calculations of HEPI to eight types of educational institutions:

- Public institutions as a whole
- Public doctoral degree-granting institutions
- Public master's 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 faculty salary and fringe benefit information for each type of institution, while holding the other six HEPI cost factors constant. Table C on page 13 shows HEPI for FY2014 – 2023 for these institution types.

For FY2023, HEPI data showed that costs for private institutions rose at 4.5 percent, a rate 19 percent higher than the 3.8 percent increase for public institutions. Private institution price increases exceeded those for public institutions 63 percent of the time since we began tracking them in 2005, albeit by a very marginal 0.1 percent on average. However the average rate of inflation over the past five years for public institutions (3.3 percent) has slightly exceed that of private institutions (3.0 percent).

For private institutions the 4.5 percent increase in costs for FY2023 was the third highest of the past decade, exceeded only by 5.4 percent in FY2022 and 8.0 percent in FY2018. Outside of these two years, there were three years when costs inflated between 3.0 and 4.0 percent and less than 3.0 percent in other years, including two years in which costs declined (FY2016 and FY2021). Similarly for public institutions, the FY2023 increase of 3.8 percent is the second highest of the past decade, following only the FY2022 increase of 5.1 percent. Before that, the next highest rate of inflation for public institutions was the equivalent 5.1 percent increase in FY2006.

TABLE C

HIGHER EDUCATION PRICE INDEX BY MAJOR CATEGORIES OF PUBLIC AND PRIVATE EDUCATIONAL INSTITUTIONS

Fiscal Years 2014 - 2023

		NATIONAL	PUBLIC INSTITUTIONS				PRIVATE INSTITUTIONS			
	Fiscal year	Total	Total	Doctoral	Master's	2 Year College	Total	Doctoral	Master's	Baccalaureate
Index Value	2014	306.7	302.5	334.3	301.1	295.9	322.1	366.3	319.9	323.7
	2015	312.9	308.3	340.1	306.2	300.9	328.7	374.6	321.8	328.4
	2016	317.7	311.7	347.8	313.8	312.3	321.3	375.7	321.3	318.3
	2017	327.4	322.9	360.4	325.0	319.5	332.8	389.1	337.1	330.4
	2018	336.1	332.0	371.3	334.3	334.1	359.3	405.1	353.2	368.2
	2019	346.0	341.0	381.9	342.5	341.4	367.6	417.9	351.4	374.2
	2020	352.7	346.1	387.6	344.3	340.9	380.0	427.4	360.8	376.8
	2021	362.3	357.7	400.4	359.8	345.5	377.4	431.4	360.1	373.4
	2022	381.1	375.9	419.0	378.1	362.2	397.9	454.2	380.4	394.7
	2023	396.2	390.1	433.0	393.1	378.4	415.9	476.1	392.5	412.7
Yearly % Change	2014	3.0%	3.2%	2.7%	2.3%	3.4%	3.2%	3.3%	2.3%	3.4%
	2015	2.0%	1.9%	1.7%	1.7%	1.7%	2.1%	2.3%	0.6%	1.4%
	2016	1.5%	1.1%	2.3%	2.5%	3.8%	-2.3%	0.3%	-0.2%	-3.1%
	2017	3.0%	3.6%	3.6%	3.6%	2.3%	3.6%	3.6%	4.9%	3.8%
	2018	2.6%	2.8%	3.0%	2.8%	4.6%	8.0%	4.1%	4.8%	11.4%
	2019	3.0%	2.7%	2.9%	2.5%	2.2%	2.3%	3.2%	-0.5%	1.6%
	2020	1.9%	1.5%	1.5%	0.6%	-0.1%	3.4%	2.3%	2.7%	0.7%
	2021	2.7%	3.4%	3.3%	4.5%	1.3%	-0.7%	0.9%	-0.2%	-0.9%
	2022	5.2%	5.1%	4.7%	5.1%	4.8%	5.4%	5.3%	5.6%	5.7%
	2023	4.0%	3.8%	3.3%	4.0%	4.5%	4.5%	4.8%	3.2%	4.6%

Faculty Salary Differences by Institution Type

As shown in Figures 7 and 8 on the following page, faculty salaries—the most heavily weighted component of HEPI—saw an increase of 4.4 percent at public institutions and 3.8 percent at private institutions. The increase in faculty salaries at public institutions more than doubled from the FY2022 rate of 1.8 percent, and for private institutions the rate rose from 2.2 percent in FY2022.

Among public institutions, faculty salaries rose 4.3 percent at doctoral institutions and 3.8 percent at master's degree-granting institutions – both rates were more than double those of FY2022. Faculty salaries at private doctoral institutions increased 3.6 percent, and 2.5 percent at master's degree-granting institutions (the latter rising from 0.5 percent in FY2022). Public 2-year colleges and private baccalaureate institutions saw faculty salaries rise 4.1 percent and 3.7 percent, respectively.

FIGURE 7

FY2023 FACULTY SALARIES PUBLIC INSTITUTIONS

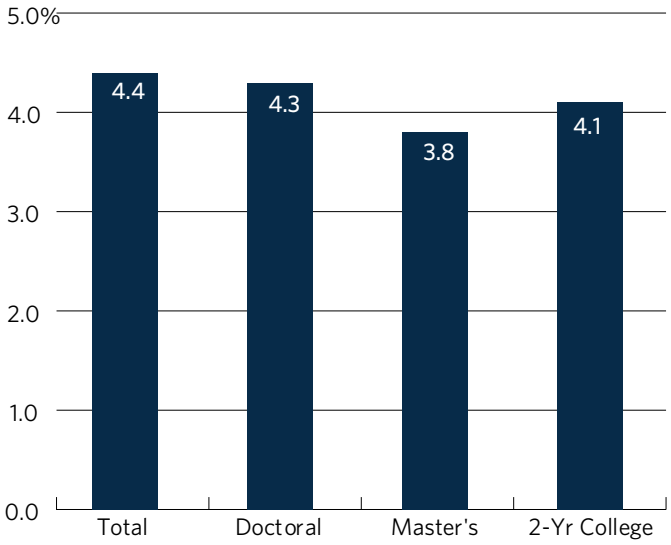
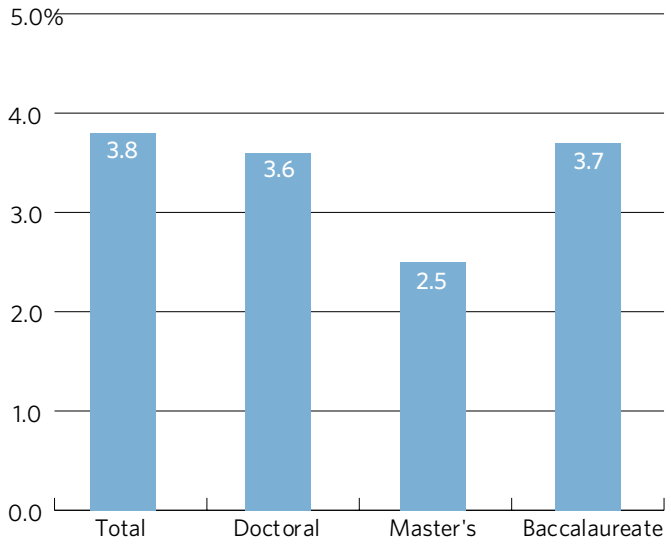


FIGURE 8

FY2023 FACULTY SALARIES PRIVATE INSTITUTIONS



On average, fringe benefit costs rose 1.3 percent at public institutions, falling from 2.3 percent in FY2022 and 7.3 percent in FY2021. At private institutions, fringe benefit costs increased 6.1 percent in FY2023 from 4.1 percent in FY2022 and -3.5 percent in FY2021.

Among public institutions, fringe benefit costs rose the most at two-year colleges for the second year in a row, at a rate of 5.4 percent in FY2023. Fringe benefits at public master's degree-granting institutions rose by 3.3 percent, and at public doctoral institutions by 0.5 percent in FY2023. Fringe benefit costs increased across private institution types in FY2023: a 6.8 percent increase at doctoral institutions, 6.1 percent increase at baccalaureate institutions, and 1.6 percent at master's degree-granting institutions.

FIGURE 9

FY2023 FRINGE BENEFIT COSTS PUBLIC INSTITUTIONS

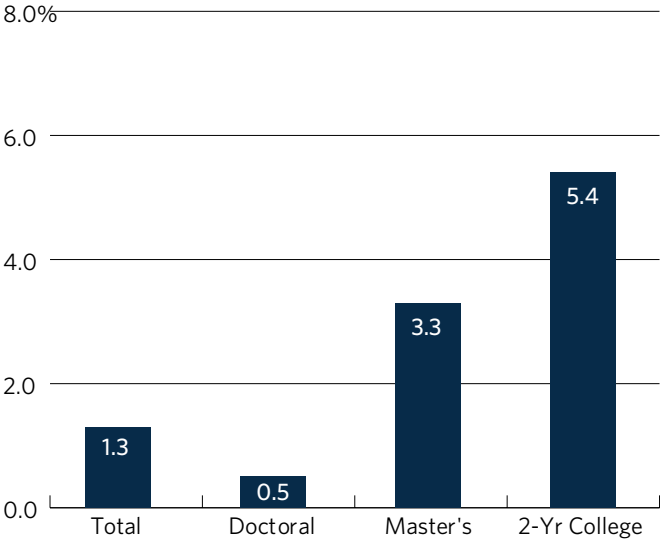
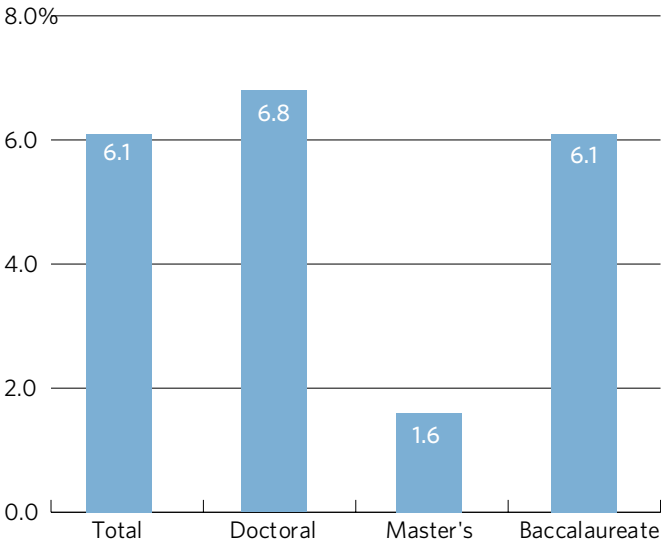


FIGURE 10

FY2023 FRINGE BENEFIT COSTS PRIVATE INSTITUTIONS

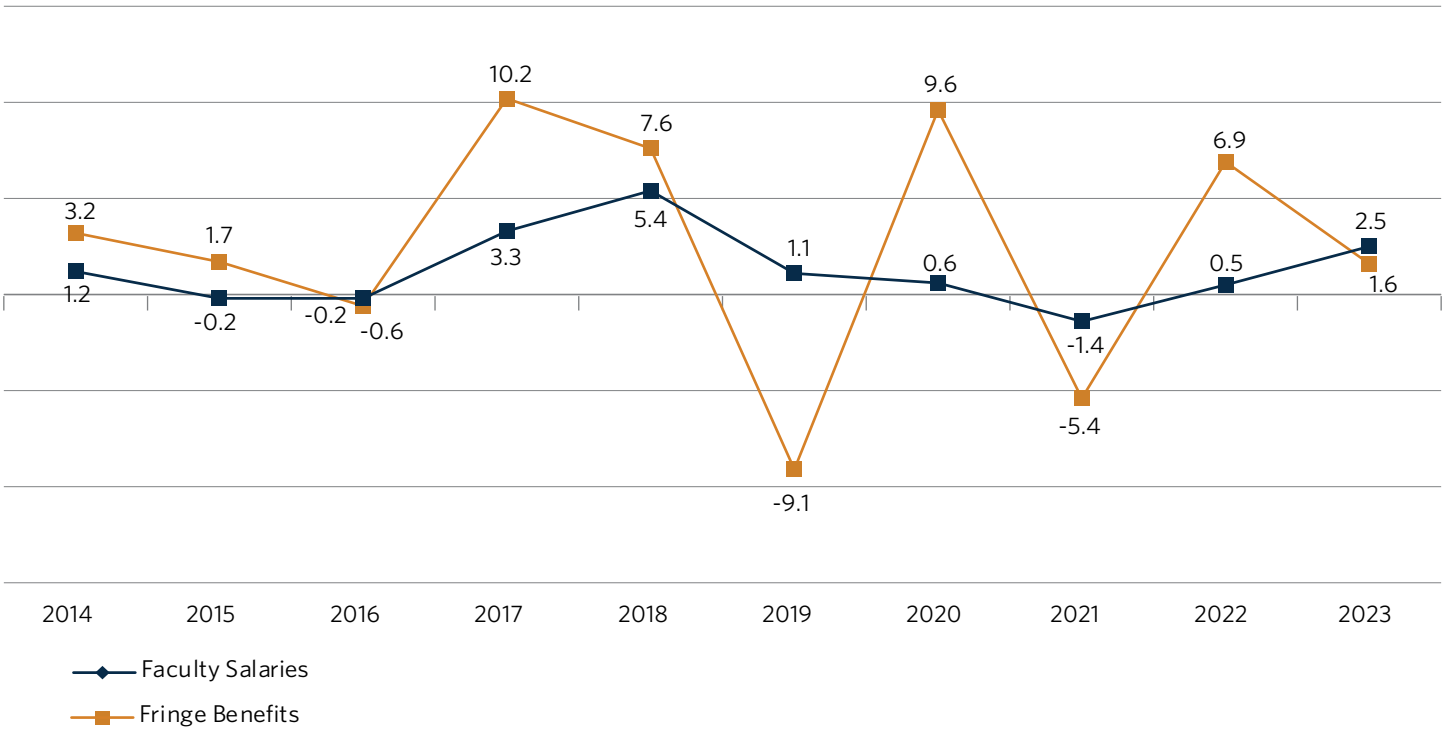


As shown in Figure 11, faculty salaries at private master's degree-granting institutions increased 2.5 percent in FY2023 following an increase of 0.5 percent in FY2022 and -1.4 percent in FY2021. Fringe benefit cost increases at private master's degree-granting institutions fell to a rate of 1.6 percent FY2023 after increasing 6.9 percent in FY2022. As Figure 11 also shows, fringe benefit costs have been highly volatile, rising or falling by more than 10 percentage points in five of the past seven years that this category has been documented.

FIGURE 11

FY2023 FACULTY SALARIES AND FRINGE BENEFIT COSTS
PRIVATE MASTER'S DEGREE-GRANTING INSTITUTIONS

Numbers in percent



Higher Education Price Indices for Different Regions of the Country

Since FY2009, Commonfund has been providing calculations of HEPI for the nine standard 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 on page 17, shows HEPI for FY2014 – 2023 for the nine regions.

TABLE D

HIGHER EDUCATION PRICE INDEX SUMMARIZED BY REGION

Fiscal years 2014-2023

	Fiscal Year	HEPI National	New England	Middle Atlantic	East North Central	West North Central	South Atlantic	East South Central	West South Central	Mountain	Pacific
Index Value	2014	306.7	314.2	307.2	302.1	308.5	300.1	307.4	314.0	307.2	323.7
	2015	312.9	320.6	310.1	308.1	314.3	304.9	312.5	319.6	316.2	331.8
	2016	317.7	326.5	316.5	314.1	319.4	312.6	313.9	327.9	322.9	329.5
	2017	327.4	334.6	324.1	320.4	325.3	323.6	322.1	333.5	327.9	350.3
	2018	336.1	343.5	333.6	323.6	335.3	333.2	331.6	345.6	335.7	363.7
	2019	346.0	350.2	342.7	338.3	341.4	341.3	343.5	351.6	342.9	373.7
	2020	352.7	360.2	344.7	343.1	353.9	350.3	352.7	359.8	350.5	383.4
	2021	362.3	366.1	354.5	348.2	358.5	357.7	357.6	366.2	354.6	403.8
	2022	381.1	388.0	374.3	361.3	379.2	378.7	376.8	384.9	373.4	433.3
	2023	396.2	404.4	389.1	377.0	392.5	396.9	391.3	398.2	390.1	453.5
Yearly % Change	2014	3.0%	2.2%	0.4%	2.4%	3.1%	5.1%	4.0%	4.3%	2.9%	2.3%
	2015	2.0%	2.0%	0.9%	2.0%	1.9%	1.6%	1.7%	1.8%	2.9%	2.5%
	2016	1.5%	1.9%	2.0%	1.9%	1.6%	2.5%	0.5%	2.6%	2.1%	-0.7%
	2017	3.0%	2.5%	2.4%	2.0%	1.8%	3.5%	2.6%	1.7%	1.6%	6.3%
	2018	2.6%	2.6%	2.9%	1.0%	3.1%	3.0%	2.9%	3.6%	2.4%	3.8%
	2019	3.0%	2.0%	2.7%	4.5%	1.8%	2.4%	3.6%	1.7%	2.1%	2.8%
	2020	1.9%	2.9%	0.6%	1.4%	3.6%	2.6%	2.7%	2.3%	2.2%	2.6%
	2021	2.7%	1.6%	2.8%	1.5%	1.3%	2.1%	1.4%	1.8%	1.2%	5.3%
	2022	5.2%	6.0%	5.6%	3.7%	5.8%	5.9%	5.4%	5.1%	5.3%	7.3%
	2023	4.0%	4.2%	4.0%	4.4%	3.5%	4.8%	3.9%	3.5%	4.5%	4.6%

Faculty Salary Differences by Region

Data in Figure 12 show that regional faculty salary increases in FY2023 ranged from a high of 5.8 percent in the Mountain region to low of 2.2 percent in the West South Central region. Inflation of faculty salaries rose from FY2022 rates in eight of the nine regions, with the exception of the West South Central region, which fell from 2.9 percent in FY2022 to 2.2 percent in FY2023. The largest year over year increase came in the East North Central region, which rose 4.4 percentage points from 0.3 percent in FY2022.

FIGURE 12

FY2023 FACULTY SALARIES BY REGION

Numbers in percent

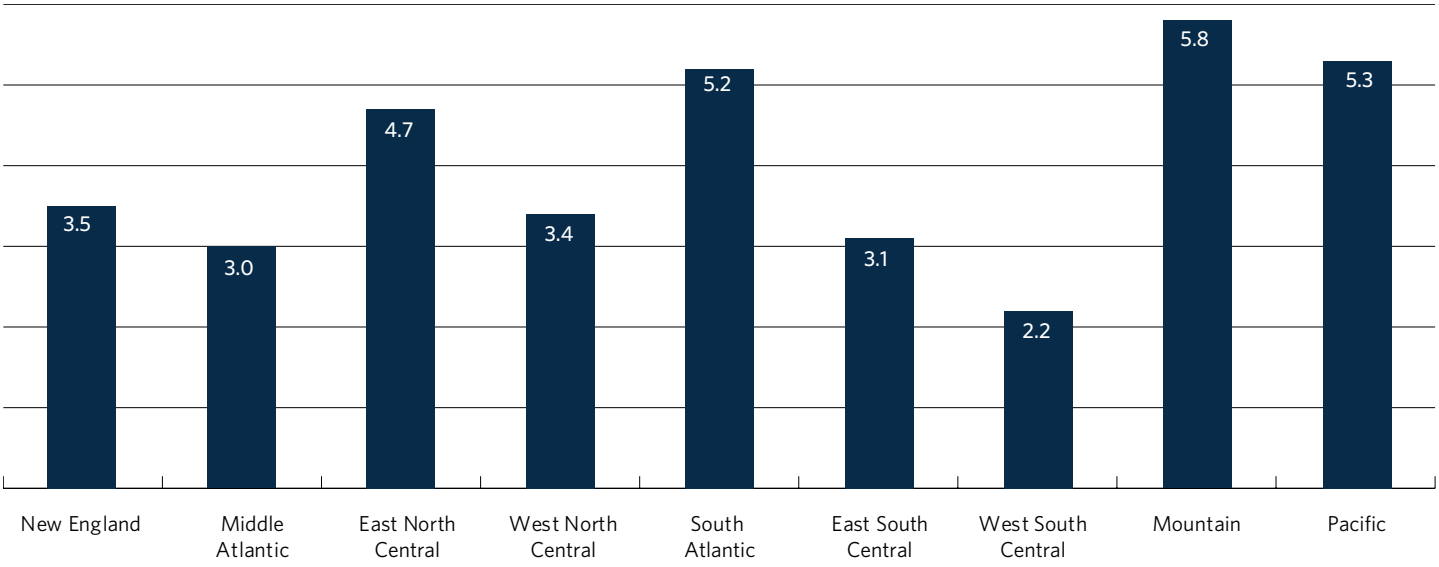
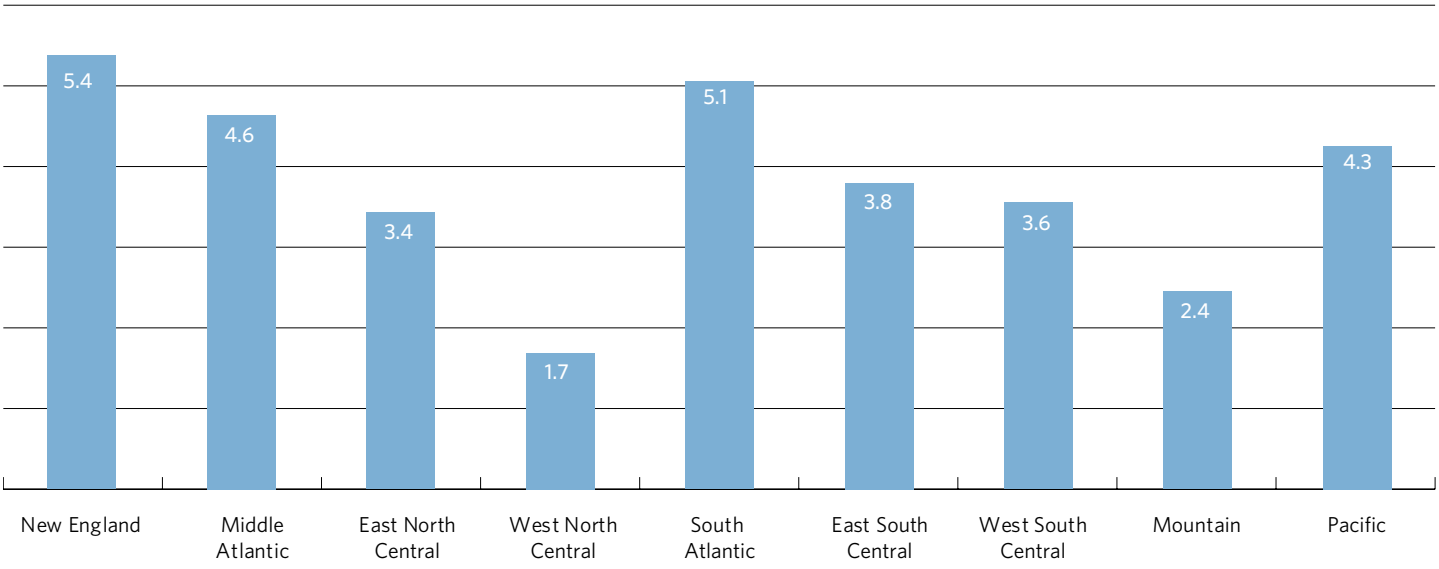


FIGURE 13

FY2023 FRINGE BENEFITS BY REGION

Numbers in percent



Fringe benefit costs rose in seven out of nine regions. The highest rate of fringe benefit growth in FY2023, 5.4 percent, was in the New England region, and the least, 1.7 percent, was in the West North Central region. As with faculty salaries, the largest year over year increase in fringe benefit costs was in the East North Central region, rising 6.3 percentage points from -2.9 percent in FY2022.

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 components, 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 component 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, Commonfund Institute also gathers information about the salaries of full-time 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, on page 21, shows that salaries of professors at public doctoral-level institutions have increased in constant terms over the last 56 years by $15,676, evidencing an increase in real purchasing power over time. This is, however, a measurable decline from the $17,503 increase in real purchasing power reported in FY2022, and $23,560 for FY2021 (each referring to the inflation adjusted change since FY1967). With salaries at public doctoral institutions contracting in constant terms by $2,923 in FY2023, this indicates the mounting pressures on faculty salaries due to inflation. For public comprehensive institutions, real salaries have fallen by $2,566 in FY2023, and by $1,968 at public two-year colleges.

Table F shows that at private colleges, salaries are ahead of those at public institutions and increased in absolute terms but have not kept pace with inflation this fiscal year. Salaries at private doctoral-level institutions rose far more in real terms than those at respective public institutions – by $68,328 since FY1967, compared with the $69,475 increase reported in FY2022. Real faculty salaries fell by $5,497 for private doctoral institutions in FY2023, by $4,386 for private comprehensive institutions, and by $3,282 for private baccalaureate institutions. While the one-year decline in real salaries was greater at private institutions for each institution type, salaries at doctoral institutions were $63,145 higher at private institutions than public ones. The difference between public and private institution salaries is less dramatic for comprehensive institutions and two-year colleges – $11,895 and $35,935, respectively.

Looking at 5-year changes to faculty salaries, FY2023 posted the largest declines in inflation-adjusted faculty salaries since FY1982 or FY1983, for each of the four categories with available data. For example, for public doctoral institutions, the average faculty salary in FY2023 is $154,784, which is $12,347 less than the FY2018 level of $167,131 (current dollars). The last time the 5-year change dropped this steeply was in FY1982, when salaries fell from $126,451 in FY1978 to $113,668 in FY1982 (current dollars). (Note this analysis of 5-year changes does not include faculty salaries at private comprehensive or baccalaureate institutions, due to data limitations in FY2018.)

TABLE E

HIGHER EDUCATION FACULTY SALARIES IN CURRENT AND CONSTANT FY2023 DOLLARS

Illustrative data—Fiscal Years 1967 to 2023

Public Faculty Salaries

Full professor average 9 - 10 month salaries by type of institution

	Category I (Doctoral-Level)			Cat IIA (Comprehensive)			Cat III (Two-Year Colleges)		
Fiscal year	Amount	Yearly %	Constant FY23 dollars	Amount	Yearly %	Constant FY23 dollars	Amount	Yearly %	Constant FY23 dollars
1967	$15,273	----	$139,108	$12,798	----	$116,566	$9,927	----	$90,416
1968	$16,160	5.8%	$142,485	$13,747	7.4%	$121,209	$10,659	7.4%	$93,982
1969	$16,900	4.6%	$142,130	$14,550	5.8%	$122,366	$11,800	10.7%	$99,239
1970	$17,750	5.0%	$140,949	$15,400	5.8%	$122,288	$12,950	9.7%	$102,833
1971	$18,600	4.8%	$140,357	$16,350	6.2%	$123,378	$14,150	9.3%	$106,777
1972	$19,678	5.8%	$143,269	$17,313	5.9%	$126,050	$15,217	7.5%	$110,790
1973	$20,545	4.4%	$143,943	$18,446	6.5%	$129,237	$17,080	12.2%	$119,666
1974	$21,400	4.2%	$137,651	$19,600	6.3%	$126,073	$18,100	6.0%	$116,424
1975	$22,648	5.8%	$131,055	$20,840	6.3%	$120,593	$19,312	6.7%	$111,751
1976	$24,277	7.2%	$131,227	$22,067	5.9%	$119,281	$20,254	4.9%	$109,481
1977	$25,210	3.8%	$128,780	$23,190	5.1%	$118,462	$21,860	7.9%	$111,667
1978	$26,420	4.8%	$126,451	$24,290	4.7%	$116,256	$23,240	6.3%	$111,231
1979	$28,000	6.0%	$122,550	$25,030	3.0%	$109,551	$23,420	0.8%	$102,504
1980	$30,120	7.6%	$116,293	$27,200	8.7%	$105,019	$25,190	7.6%	$97,259
1981	$32,850	9.1%	$113,721	$29,580	8.8%	$102,401	$26,200	4.0%	$90,700
1982	$35,680	8.6%	$113,668	$31,700	7.2%	$100,989	$27,720	5.8%	$88,309
1983	$38,180	7.0%	$116,576	$33,490	5.6%	$102,256	$30,480	10.0%	$93,066
1984	$39,770	4.2%	$117,150	$34,560	3.2%	$101,803	$31,510	3.4%	$92,819
1985	$42,560	7.0%	$120,648	$37,090	7.3%	$105,141	$33,230	5.5%	$94,199
1986	$45,560	7.0%	$125,519	$39,720	7.1%	$109,429	$34,870	4.9%	$96,068
1987	$48,740	7.0%	$131,350	$42,290	6.5%	$113,968	$37,460	7.4%	$100,951
1988	$51,080	4.8%	$132,173	$46,060	8.9%	$119,184	$38,230	2.1%	$98,923
1989	$54,240	6.2%	$134,100	$46,920	1.9%	$116,002	$41,200	7.8%	$101,860
1990	$57,520	6.0%	$135,725	$49,610	5.7%	$117,060	$43,000	4.4%	$101,463
1991	$60,450	5.1%	$135,318	$52,190	5.2%	$116,828	$45,050	4.8%	$100,845
1992	$61,950	2.5%	$134,342	$53,750	3.0%	$116,560	$47,700	5.9%	$103,440
1993	$63,250	2.1%	$133,005	$54,240	0.9%	$114,059	$47,820	0.3%	$100,558
1994	$64,860	2.5%	$133,091	$55,690	2.7%	$114,274	$49,120	2.7%	$100,793
1995	$67,560	4.2%	$134,650	$57,090	2.5%	$113,783	$51,490	4.8%	$102,622
1996	$69,750	3.2%	$135,305	$58,520	2.5%	$113,520	$51,560	0.1%	$100,019
1997	$72,220	3.5%	$136,203	$60,481	3.4%	$114,064	$52,752	2.3%	$99,487
1998	$75,154	4.1%	$139,242	$61,839	2.2%	$114,572	$53,024	0.5%	$98,240
1999	$79,284	5.5%	$144,440	$63,817	3.2%	$116,262	$55,326	4.3%	$100,793
2000	$82,535	4.1%	$146,091	$66,657	4.5%	$117,986	$57,089	3.2%	$101,050
2001	$84,007	1.8%	$143,779	$68,828	3.3%	$117,800	$57,932	1.5%	$99,151
2002	$89,631	6.7%	$150,743	$72,770	5.7%	$122,386	$60,997	5.3%	$102,586
2003	$92,387	3.1%	$152,036	$74,545	2.4%	$122,674	$65,730	7.8%	$108,168
2004	$94,606	2.4%	$152,355	$74,872	0.4%	$120,575	$64,439	-2.0%	$103,774
2005	$97,948	3.5%	$153,129	$76,665	2.4%	$119,856	$66,405	3.1%	$103,816
2006	$101,620	3.7%	$153,042	$78,884	2.9%	$118,801	$66,011	-0.6%	$99,414
2007	$106,495	4.8%	$156,340	$81,855	3.8%	$120,167	$68,424	3.7%	$100,450
2008	$111,807	5.0%	$158,274	$85,642	4.6%	$121,235	$71,936	5.1%	$101,832
2009	$115,509	3.3%	$161,263	$88,357	3.2%	$123,356	$74,933	4.2%	$104,614
2010	$116,750	1.1%	$161,448	$89,648	1.5%	$123,970	$74,103	-1.1%	$102,473
2011	$118,054	1.1%	$160,023	$89,808	0.2%	$121,735	$74,092	0.0%	$100,432
2012	$120,955	2.5%	$159,288	$88,940	-1.0%	$117,127	$73,534	-0.8%	$96,839
2013	$123,393	2.0%	$159,839	$88,988	0.1%	$115,272	$74,845	1.8%	$96,951
2014	$126,981	2.9%	$161,957	$90,517	1.7%	$115,449	$77,671	3.8%	$99,065
2015	$130,039	2.4%	$164,658	$91,389	1.0%	$115,719	$79,234	2.0%	$100,328
2016	$133,552	2.7%	$167,973	$95,433	4.4%	$120,029	$84,848	7.1%	$106,716
2017	$134,562	0.8%	$166,187	$97,406	2.1%	$120,298	$84,871	0.0%	$104,817
2018	$138,377	2.8%	$167,131	$99,307	2.0%	$119,942	$88,168	3.9%	$106,489
2019	$141,327	2.1%	$167,228	$100,775	1.5%	$119,244	$91,418	3.7%	$108,172
2020	$145,768	3.1%	$169,827	$102,218	1.4%	$119,089	$91,949	0.6%	$107,125
2021	$145,710	0.0%	$165,940	$102,450	0.2%	$116,674	$91,196	-0.8%	$103,857
2022	$148,414	1.9%	$157,707	$104,175	1.7%	$110,698	$91,282	0.1%	$96,998
2023	$154,784	4.3%	$154,784	$108,132	3.8%	$108,132	$95,030	4.1%	$95,030

**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 FY2023 DOLLARS

Illustrative data—Fiscal Years 1967 to 2023

Private Faculty Salaries
Full professor average 9 - 10 month salaries by type of institution

	Category I (Doctoral-Level)			Cat IIA (Comprehensive)			Cat III (Two-Year Colleges)†		
Fiscal year	**Amount**	**Yearly %**	**Constant FY23 dollars**	**Amount**	**Yearly %**	**Constant FY23 dollars**	**Amount**	**Yearly %**	**Constant FY23 dollars**
1967	$16,425	----	$149,601	$11,722	----	$106,765			
1968	$17,057	3.8%	$150,394	$12,572	7.3%	$110,849			
1969	$18,050	5.8%	$151,802	$13,250	5.4%	$111,433			
1970	$18,950	5.0%	$150,478	$14,100	6.4%	$111,965			
1971	$19,800	4.5%	$149,412	$14,950	6.0%	$112,814			
1972	$20,775	4.9%	$151,256	$15,899	6.3%	$115,755			
1973	$21,507	3.5%	$150,683	$16,501	3.8%	$115,610			
1974	$22,600	5.1%	$145,369	$17,200	4.2%	$110,635			
1975	$23,832	5.5%	$137,906	$18,047	4.9%	$104,431			
1976	$25,368	6.4%	$137,124	$19,153	6.1%	$103,530			
1977	$27,810	9.6%	$142,062	$22,020	15.0%	$112,485	$20,780		$106,151
1978	$28,880	3.8%	$138,225	$23,380	6.2%	$111,901	$21,790	4.9%	$104,291
1979	$31,090	7.7%	$136,074	$24,830	6.2%	$108,676	$23,230	6.6%	$101,673
1980	$33,400	7.4%	$128,957	$26,160	5.4%	$101,004	$24,740	6.5%	$95,521
1981	$36,000	7.8%	$124,626	$28,710	9.7%	$99,389	$27,030	9.3%	$93,574
1982	$40,220	11.7%	$128,131	$31,530	9.8%	$100,447	$29,720	10.0%	$94,681
1983	$43,950	9.3%	$134,194	$33,750	7.0%	$103,050	$32,410	9.1%	$98,959
1984	$47,070	7.1%	$138,654	$36,000	6.7%	$106,045	$34,140	5.3%	$100,566
1985	$49,880	6.0%	$141,398	$37,980	5.5%	$107,664	$36,500	6.9%	$103,469
1986	$53,190	6.6%	$146,540	$40,170	5.8%	$110,669	$38,200	4.7%	$105,242
1987	$56,900	7.0%	$153,341	$42,680	6.2%	$115,019	$40,460	5.9%	$109,036
1988	$59,850	5.2%	$154,866	$44,010	3.1%	$113,879	$42,540	5.1%	$110,075
1989	$64,290	7.4%	$158,947	$47,010	6.8%	$116,225	$44,770	5.2%	$110,687
1990	$68,360	6.3%	$161,303	$51,000	8.5%	$120,340	$46,830	4.6%	$110,501
1991	$72,950	6.7%	$163,300	$52,820	3.6%	$118,238	$49,610	5.9%	$111,053
1992	$76,890	5.4%	$166,741	$54,980	4.1%	$119,228	$52,230	5.3%	$113,264
1993	$80,280	4.4%	$168,817	$57,060	3.8%	$119,989	$54,620	4.6%	$114,858
1994	$82,520	2.8%	$169,329	$59,610	4.5%	$122,318	$56,780	4.0%	$116,511
1995	$84,790	2.8%	$168,990	$60,830	2.0%	$121,237	$58,040	2.2%	$115,676
1996	$88,050	3.8%	$170,805	$63,430	4.3%	$123,045	$59,830	3.1%	$116,062
1997	$92,112	4.6%	$173,718	$64,468	1.6%	$121,583	$62,047	3.7%	$117,017
1998	$95,023	3.2%	$176,054	$67,282	4.4%	$124,657	$64,784	4.4%	$120,029
1999	$98,606	3.8%	$179,640	$69,509	3.3%	$126,631	$67,180	3.7%	$122,389
2000	$103,761	5.2%	$183,662	$71,547	2.9%	$126,642	$70,528	5.0%	$124,838
2001	$107,633	3.7%	$184,215	$75,143	5.0%	$128,608	$74,031	5.0%	$126,705
2002	$112,534	4.6%	$189,261	$77,310	2.9%	$130,021	$76,692	3.6%	$128,982
2003	$118,269	5.1%	$194,628	$80,011	3.5%	$131,669	$79,928	4.2%	$131,533
2004	$122,158	3.3%	$196,725	$81,570	1.9%	$131,362	$82,344	3.0%	$132,608
2005	$127,214	4.1%	$198,883	$83,986	3.0%	$131,301	$85,575	3.9%	$133,785
2006	$131,292	3.2%	$197,728	$88,800	5.7%	$133,734	$87,779	2.6%	$132,197
2007	$136,689	4.1%	$200,667	$91,197	2.7%	$133,882	$90,353	2.9%	$132,643
2008	$144,428	5.7%	$204,452	$95,114	4.3%	$134,643	$94,139	4.2%	$133,263
2009	$151,403	4.8%	$211,375	$99,555	4.7%	$138,989	$98,808	5.0%	$137,946
2010	$153,332	1.3%	$212,035	$99,963	0.4%	$138,234	$98,098	-0.7%	$135,655
2011	$157,282	2.6%	$213,197	$101,290	1.3%	$137,299	$99,976	1.9%	$135,518
2012	$162,561	3.4%	$214,080	$103,094	1.8%	$135,767	$101,568	1.6%	$133,757
2013	$167,118	2.8%	$216,478	$104,186	1.1%	$134,959	$104,335	2.7%	$135,152
2014	$173,890	4.1%	$221,786	$107,082	2.8%	$136,577	$106,641	2.2%	$136,014
2015	$177,600	2.1%	$224,881	§	§	$135,307	$108,741	2.0%	$137,690
2016	$177,513	0.0%	$223,264	§	§	§	§	§	§
2017	$181,416	2.2%	$224,052	§	§	§	§	§	§
2018	$189,889	4.7%	$229,346	§	§	§	§	§	§
2019	$195,995	3.2%	$231,915	$117,355	1.1%	$138,863	$125,025	1.8%	$147,938
2020	$203,221	3.7%	$236,762	$118,076	0.6%	$137,564	$127,137	1.7%	$148,121
2021	$202,623	-0.3%	$230,754	$116,452	-1.4%	$132,620	$125,420	-1.4%	$142,833
2022	$210,260	3.8%	$223,426	$117,082	0.5%	$124,413	$126,336	0.7%	$134,247
2023	$217,929	3.6%	$217,929	$120,027	2.5%	$120,027	$130,965	3.7%	$130,965

**Constant dollars based on inflation measured by the Consumer Price Index.*
†Data collection by AAUP did not begin until FY1977 for this category.
§Due to a change in the methodology used by AAUP there was a discontinuity and these data cannot be cited reliably.
Sources: FY1967 – FY1976, NCES; FY1977 – present, AAUP

The Design of HEPI

The Higher Education Price Index (HEPI) measures price levels from a designated reference year in which budget weights are assigned. This base year is FY1983 and is assigned a price value of 100.0 for index compilation.[1] Comparing one year's index value with that of another year reflects relative change. An index value of 115.0, for example, represents a 15 percent price increase over 1983 values. This change can also be expressed in monetary terms so that the price of $100 worth of goods and services purchased in 1983 in this example would have risen to $115. Movements of the index from one year to another are usually expressed as percent changes by dividing a later year's value by that of any earlier year and subtracting 1.00. Thus, an increase in index values from 125.6 in 1987 to 134.4 in 1988 would be a yearly increase of 134.4/125.6 = 1.07 minus 1.00, or 7 percent. The HEPI in this study represents fiscal year (July 1 to June 30) average values. Values are compiled by computer and reported to the nearest tenth, which properly suggests the degree of accuracy involved.

Since FY2002 the Higher Education Price Index (HEPI) has been based on a regression formula. The eight regression components employed represent 79.6 percent of the HEPI weighted whole in 1990. The regression-based index values are essentially equal to those resulting from complete data. The R-square value of the regression is .999997809 based on 41 observations. Regression-calculated HEPI values are not likely to vary from fully compiled values by more than 0.1 parts out of 200.0 or ±0.05 percent. The regression analysis is shown below the table.

Price Index Theory and Design

A price index measures the effects of price change and price change only, as reflected by differences in the overall price level of a fixed group of items. The procedure in calculating the index is to measure the price level of purchased items each year, comparing the aggregate amount paid to that of the base period. The amount and quality of the selected commodities that make up the market basket being indexed must remain constant so that only the effects of price changes are reflected. The quantities represent not only annual consumption of the specific sample items actually priced by the index, but also consumption of related items for which prices are not obtained, so that the total cost of the market basket represents total spending for goods and services. Under these restrictive conditions, the change in price index values from year to year may be interpreted as the change in dollars required to offset the effects of inflation in buying the same kinds and amounts of goods and services previously purchased.

What makes a price index so valuable is that by reporting only price increases, without quality or quantity changes, the series documents the additional revenues required for continuation of "business as usual." Few financial supporters can deny that funding should at least maintain the status quo, if not improve it. Thus, price indices reliably report increased funding requirements that can be defended as essential if the same services are to be maintained. If quality changes were to be included, then the force of the argument would be lost, since justification of the added costs to improve operations is seldom obvious.

To achieve its intended purpose of reporting only price changes, a price index attempts to hold constant all other factors. A persistent and nearly irresolvable problem in this regard is eliminating the effect on prices of quality changes in purchased goods and services. When possible, a process of "linking" is used whereby the price of a new item is tied to the price of an old item by factoring out the price difference due to the change in quality involved. For personnel services, quality is fixed by specific job descriptions. Improvements in training and growth in individual talents brought to professional positions are considered constant in the sense that the present mix of new practitioners and senior personnel consistently represents the current average "state-of-the-art" in training and tenure.

[1]Once compiled, index values can be converted to any year equal to 100 simply by dividing all indices in the series by the subject year's value. Thus, a price series with the base year 1983=100.0 and 2001=195.0 can be converted to a 2001=100 base year with 1983 then equal to 100.0/195.0=51.3. Converting index values to the current (2001) base year places all adjusted figures in the most recent (2001) dollars, which is a useful, recognized point of reference.

A price index holds constant the mix of purchases and, implicitly, the mix of their general use by a single type of consumer. This consistency is accomplished by designing and fix-weighting the index components according to the buyer's budget composition. The price series for each component must be set equal to 100 in the base year for which the budget weights are established. (FY1983 is the base year for the HEPI in this report.) Each year the price changes or price relatives (ratio of following to previous year price) for the various items being priced are weighted according to this base year expenditure pattern. The budget percentages (weights) represent the actual physical count mix of items involved. The index must not be re-weighted unless there is a substantial change in the consumer's buying pattern, which results in a different mix in the actual physical count of goods and services purchased.

To the extent that college faculty, university researchers and school teachers use different pedagogy, analyses, instruments, equipment and materials from year to year—or that institutions employ different mixes of personnel and capital to accomplish their objectives—the use of a fixed-weight index fails to price current actual practices. Also, a price index does not account for changes in the mix of students; for example, in the higher education community an increase over time in the proportion of handicapped or graduate students and the associated higher overall per-student costs would not be reflected in a price index series. Re-weighting the index is required when such changes result in large differences in the physical count proportions involved.

HEPI Uses

The most frequent use colleges and schools make of the HEPI is in projecting future budget increases required to preserve purchasing power. If next year's inflation affecting current operations is expected to be 6 percent, the budget must be increased by this amount if the same level and quality of goods and services are to be purchased.

The basic nature of price indices in reflecting yearly percent changes, however, cannot be projected in the traditional manner. Incremental changes seldom exhibit trends on which an extrapolation can be based. A two- or three-year average increase in annual percentage changes is not predictive that this phenomenon will continue into the future.

HEPI can also serve the following additional uses:

- Index values may be projected into the future to estimate the degree of change in expenditures that will be necessitated by anticipated price changes. If price increases are expected, the projected index value are used to inflate expected real resource needs to equal future funding requirements in actual dollars. Usually, these real resource needs are expressed in user unit terms, e.g., constant (inflation-adjusted) dollars per full-time-equivalent student. Budget requests based on a projected HEPI account only for inflation, i.e., provision of additional funding sufficient to purchase the same resources as acquired in the previous year. Additional funding for greater student load, program expansion, and improvements in quality would need to be separately requested and justified.

- Past expenditures may be compared with movements in a price index to ascertain whether spending has kept pace with price level changes. Adjusting expenditures by an appropriate price index to convert actual or current dollars to constant dollars permits comparison over time of the real purchasing power of funding levels.

- Similarly, dollar incomes may be deflated by a price index to identify trends in the level of real purchasing power of funding by various sources.

- Price indices may be used to provide automatic inflation adjustment of various administrative and contractual transactions. The price charged for a particular service, for example, may be tied to input prices or the cost of labor as measured by an appropriate price index.

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HEPI Questions and Answers

What is the Higher Education Price Index (HEPI)

The Higher Education Price Index (HEPI) is an inflation index, released each July, that is designed specifically for higher education and is a more accurate indicator for colleges and universities than the Consumer Price Index (CPI).

From its inception in 1961, HEPI was produced by Research Associates of Washington, D.C. In 2005, Commonfund Institute assumed management of the Index. The Institute manages the database, publishes the Index, and makes available analytical and descriptive materials using HEPI data.

The HEPI report is published using the July HEPI figure, which may be subject to a further small adjustment when the last of the underlying data items are finalized in November.

Why is HEPI a better price inflation measure than CPI for colleges and universitities?

Compiled from data reported by governmental and industry sources, HEPI measures the average relative level in the prices of a fixed basket of goods and services purchased by colleges and universities each year through current fund educational and general expenditures, excluding research. HEPI includes eight categories that cover most of the current operational costs of colleges and universities and is an essential tool enabling schools to determine increases in funding necessary to maintain purchasing power and investment. The CPI, on the other hand, measures goods and services that consumers buy for day-to-day living.

What are the HEPI categories?

HEPI categories are based on price data for 45 budget components that all schools can report, organized in eight component sub-indexes: faculty salaries; administrative salaries; clerical salaries; service employee salaries; fringe benefits; miscellaneous services; supplies and materials; and utilities.

How do HEPI and the CPI differ?

The bulk of educational costs are related to personnel, mainly college faculty, whose salary increases are usually different from those measured in the CPI, which includes salaries of city wage earners and salaried clerical workers. As a case in point, from 1980 to 2000 the price of goods and services purchased by colleges and universities increased by 154 percent, while inflation measured by the CPI increased by 118 percent. Using HEPI, colleges and universities would have received 16.5 percent more support per student.

While HEPI is composed of the eight categories previously mentioned, the CPI includes: food and beverage; housing; apparel; transportation; medical care; recreation; education and communication; and other goods and services. All taxes directly associated with the purchase and use of the items are included in the index.

Another difference between the two indices is the treatment of changes in quality. HEPI is a straightforward measure of costs, whereas the CPI is a measure of "quality-adjusted prices." For example, assume that it costs $2,000 to replace an older computer that originally cost $1,500. The new computer, however, is twice as fast as the old one. HEPI would report that as a $500 price increase, while the CPI would report the new computer as a $500 price decrease due to the "quality adjustment."

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Why is the CPI provided in the HEPI report different from the one(s) published by the bureau of labor statistics (BLS)?

The BLS updates CPI statistics monthly. They also provide a six- and 12-month average change; January-June, July-December and January-December. The CPI values reported on Commonfund's website for HEPI are based on fiscal year (July 1 through June 30) 12-month averages rather than the monthly (or point-to-point) CPI values usually reported by the BLS.

What is included in the annual HEPI update?

The HEPI Update contains a comprehensive analysis of the HEPI and its components for a given year, together with a sensitivity analysis and an overview of the effects of inflation on institutional funding and faculty salaries.

Does HEPI apply to all operational expenses?

No, but it covers a substantial portion of standard budget expenses.

How is HEPI used?

HEPI is used primarily to project future budget increases required to preserve purchasing power. It is a measure of inflation for current operations, for budget hearings to justify the minimum funding requirements to maintain purchasing power, and a guideline for trends in other expense areas such as faculty salaries. Additional indicators include:

- Index values, which may be projected into the future to estimate the degree of change in expenditures that will be necessitated by anticipated price changes;
- Past expenditures, which may be compared with movements in a price index to ascertain whether spending has kept pace with price level changes;
- Dollar incomes, which may be deflated by a price index to identify trends in the level of real purchasing power of funding by various sources; and
- Price indexes, which may be used to provide automatic "inflation adjustment" of various administrative and contractual transactions.

Why is HEPI valuable?

HEPI has been widely recognized as the only benchmark to effectively monitor changes in the purchasing power of higher educational institutions. Further, as many institutions have found HEPI to be a practical tool in the successful establishment of important policies, Commonfund wishes to ensure that it continues to be produced accurately and widely disseminated within the higher education community.

By reporting only price increases, without quality or quantity changes, the series documents the additional revenues required for continuation of "business as usual." To achieve this purpose, the price index attempts to hold constant all other factors, keeping constant the mix of purchases, and implicitly, the mix of their general use by a single type of consumer.

Sources

Data for the eight HEPI components is gathered from the following sources:

- Faculty Salaries: American Association of University Professors Survey Report
- Administrative Salaries: CUPA-HR 2022 Higher Ed Workforce Surveys
- Clerical: U.S. Bureau of Labor Statistics Employment Cost Index
- Service Employees: U.S. Bureau of Labor Statistics Employment Cost Index
- Fringe Benefits: American Association of University Professors Survey Report
- Miscellaneous Services: U.S. Bureau of Labor Statistics Employment Cost Index
- Supplies and Materials: U.S. Bureau of Labor Statistics Producer Price Index (18 selected categories)
- Utilities: U.S. Bureau of Labor Statistics Producer Price Index (4 selected categories)

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