Capturing the true cost of inflation?

Higher education institutions

January 2021
Introduction

Over the past 40 years, the inflation rate in the US higher education space — as measured by the Commonfund Institute’s Higher Education Price Index™ (HEPI) — has exceeded the headline inflation rate as measured by the Consumer Price Index (CPI) by almost 40% on a cumulative basis (see Figure 1).¹

By using CPI in spending policy calculations, colleges and universities across the country may be underestimating the true level of inflation for those institutions, and thus, investment return goals may inadvertently erode purchasing power.

Figure 1. HEPI vs CPI: Growth of a dollar, 1962-2020

What is HEPI?

HEPI is the measure of inflation specific to higher education in the US, as it reports price information for the goods and services purchased by colleges and universities for current operations. It is calculated by the Commonfund Institute on a fiscal year basis ending each June.²

¹Headline inflation is measured by US CPI Urban Consumers YOY NSA
²https://www.commonfund.org/higher-education-price-index
History

Starting in 1961, Research Associates (Washington, DC) began calculating a measure of higher education inflation from data reported and published by government and economic agencies.

From 1961 to 2001, the measure was based on price data for 25 different budget components. HEPI itself has been calculated every year since 1983. In 2002, its calculation methodology changed, and has since been based on a regression formula that draws on component inputs compiled from data reported by industry sources, such as the College and University Professional Association for Human Resources, and government sources, such as the US Department of Labor’s Bureau of Labor Statistics.³ In 2005, the Commonfund Institute assumed responsibility for maintaining the Index and calculating the annual rate of change, which is published annually with quarterly estimates. The Commonfund Institute states the regression-calculated HEPI index values are essentially the same as those derived from complete data.⁴

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HEPI vs. CPI

A price index measures the change in the overall price level of a fixed basket of goods and services. The goal is to measure the price level of that fixed basket each year, comparing the amount paid to that of the base period.

In theory, the amount and quality of those purchased goods and services within the basket should remain constant so that changes in the index measure only the effects of price fluctuations. Thus, a price index may be interpreted as the change in dollars required to offset the effects of inflation for buying the same quantity and quality of goods and services each year.

There are two differences between CPI and HEPI: the underlying basket of goods and services; and quality adjustment. CPI measures the cost of goods and services that consumers in general purchase as part of daily life, including housing, food and beverages, clothing, transportation, medical costs, recreation, education and communication, other goods and services, as well as taxes directly associated with those purchases. HEPI, by contrast, is generally viewed as a more accurate indicator of changes in the costs for colleges and universities, measuring the average relative level of prices for current educational and general expenditures for these institutions, and by extension, providing insight to current cost drivers. HEPI’s fixed basket of goods and services is based on 45 budget components all schools can report, grouped into eight categories that cover most current operational costs: salaries for faculty, administrative employees, clerical employees and service employees; fringe benefits; utilities; supplies and materials; and miscellaneous expenses. (Note that expenditures for research are not included.)

The main difference in HEPI and CPI rates is attributed primarily to the fact that a large portion of educational costs are related to higher educational personnel costs. These salary increases are in general different from those measured by CPI, which includes salaries of city wage-earners and clerical employees. A second difference lies in the fact that CPI is a measure of "quality-adjusted prices," whereas HEPI is simply a measurement of costs. HEPI attempts to keep the quality and quantity of the basket of goods and services consistent and therefore may be used in projecting future budget increases necessary to maintain purchasing power.

5 Ibid
6 Ibid
As shown in Figure 2, the growth in HEPI has outpaced headline inflation, particularly over the past 20 years. Looking at rolling five-year periods, however, HEPI has not always been higher than CPI, and has seen two narrowing trends since the late 1980s.

**Figure 2. Annualized growth of inflation by indicator**

<table>
<thead>
<tr>
<th>Annualized</th>
<th>1-year</th>
<th>3-year</th>
<th>5-year</th>
<th>10-year</th>
<th>20-year</th>
</tr>
</thead>
<tbody>
<tr>
<td>HEPI</td>
<td>2.1%</td>
<td>2.5%</td>
<td>2.5%</td>
<td>2.3%</td>
<td>3.0%</td>
</tr>
<tr>
<td>CPI</td>
<td>0.6%</td>
<td>1.7%</td>
<td>1.5%</td>
<td>1.7%</td>
<td>2.0%</td>
</tr>
<tr>
<td>Difference</td>
<td>1.5%</td>
<td>0.8%</td>
<td>1.0%</td>
<td>0.6%</td>
<td>1.0%</td>
</tr>
</tbody>
</table>


**Figure 3. HEPI 5-year Rolling Average 1962-2020 (as of October 2020)**

*Source:* Commonfund, Bloomberg.
Why is this so important?

When we think about spending targets for colleges and universities, it is important to distinguish between real and nominal spending.

While spending policies for colleges and universities are unique to each particular entity based on spending rate, time-period smoothing, inclusion of a real growth rate of corpus and may be subject to caps and floors on the actual dollars spent, they generally are derived from the same basic formula:

**Nominal Spending Rate = Real Rate of Spending + Inflation Rate**

When higher education entities use CPI as the rate of inflation in their spending policy, they may underestimate the actual level of inflation they experience. They will be targeting an investment return that may be consistently below the “true” nominal spending rate and therefore lose purchasing power over time. By using HEPI to project future budget increases driven by anticipated price increases, higher education entities can properly target an investment return that avoids this shortfall.

Whether HEPI continues to outpace CPI remains to be seen, given the unprecedented amount of fiscal and monetary stimulus in 2020, but it has been doing so for a long time, as shown above. The longer-term implications are important, especially in the current COVID environment. Higher education institutions should ensure funding inflows are growing sufficiently to cover continuous growth in expenditures. The systematic underfunding and inability to keep pace with the actual inflation incurred by these institutions may lead to dire consequences, such as the inability to provide resources for staff and students, or worse, threaten an institution’s solvency.

Unless the HEPI/CPI trend reverses in the near future, we suggest that higher education institutions consider including a measure for HEPI in their return goals in order to reflect expected cost increases more accurately. We encourage Investment Committees to have a robust dialogue on the topic of achieving return goals in today’s low return environment. The solutions include allocating more to growth assets in order to increase returns; reducing distributions to lower the return goal; or consciously choosing no action and allowing the portfolio to potentially lose some purchasing power over the following decade. All of these choices come with risks and tradeoffs that should be thoroughly assessed and discussed.
We welcome feedback and dialog with you and your organization as you plan for the upcoming year. Please reach out to your Pavilion consultant or to any of our colleagues listed below.

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