

A closer look at fringe benefits for faculty

Abstract

Despite the magnitude and variety of benefits paid to faculty, there has been little attention given to these benefits. It is important to evaluate how and why faculty benefits vary by institution. In this study, I focused on the levels of benefits provided by four-year institutions to faculty. The study relied on institution-level data from NCES and the AAUP on faculty salaries and benefits spanning the period from 1980 to 2021. Separate analyses were conducted for retirement benefits, health benefits, and total benefits, with the time periods for specific analyses depending on data availability which varied over this time frame. Overall, the study documents how faculty benefits have changed over time, and whether benefits in dollar and percentage terms were related to selected characteristics of the faculty and the institutions where they work.

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Introduction

Faculty compensation is an enduring topic of interest in higher education. A number of studies have looked at the level of faculty salaries, how salaries have changed over time, and whether there are salary differences by gender, race, and type of institution (see, for example, Barbezat, 2002; Rippner & Toutkoushian, 2015). However, a topic that is often overlooked in these discussions is how much are faculty paid in the form of fringe benefits. The two largest and most well-known forms of benefits for faculty are employer contributions to their retirement accounts and health insurance. Faculty may also receive money to pay for things such as college tuition, contributions to their Social Security, disability income protection, unemployment insurance, group life insurance, workers' compensation premiums, parking on campus, and even tickets to athletic events. Collectively, these non-salary benefits can be substantial, amounting to about one-quarter of someone's overall compensation.

In contrast to data on faculty salaries by institution, which are widely available through the annual faculty compensation surveys conducted by the American Association of University Professors (AAUP) and the National Center for Education Statistics (NCES), it is harder to find data on the level and types of benefits faculty receive at different institutions. The AAUP regularly provides some information on benefits in their annual reports on the status of the academic profession (see Colby, 2022), but these data have not been widely analyzed to help gain an understanding of how benefits have changed and why they differ across institutions. The lack of information and analysis on benefits makes it challenging to evaluate the generosity of benefits at any particular college or university.

In this study, I focused on the levels of benefits provided by four-year institutions to faculty. The study relied on institution-level data from NCES and the AAUP on faculty salaries and benefits spanning the period from 1980 to 2021. Separate analyses were conducted for retirement benefits, health benefits, and total benefits, with the time periods for specific analyses depending on data availability which varied over this time frame. Overall, the study documents how faculty benefits have changed over time, and whether benefits in dollar and percentage terms were related to selected characteristics of the faculty and the institutions where they work. Particular attention was given to the interrelationships between benefits and salaries of faculty. The study contributes

to our understanding of the different ways in which institutions compensate faculty for their work.

Types of benefits for faculty

Faculty receive compensation in two main forms: salary and non-salary benefits. Benefits are a form of in-kind compensation from the employer that can only be used for a specific purpose, such as retirement or health care, whereas employees have full discretion over how to spend their salary. Benefits themselves can be separated into voluntarily provided nonwage payments, such as for retirement contributions, and payments for things such as Social Security that are mandated by law. A recent analysis by *The Chronicle of Higher Education* found that private colleges cut retirement contributions by a cumulative \$729 million between 2019 and 2020 in response to economic concerns created by the covid-19 pandemic (Bauman, 2022).

Employee benefits come in many different forms. The two most common benefits for faculty are retirement benefits and health insurance benefits. Other benefits that are less common include tuition benefits for the employee and their family members, group life insurance plans, and so on. Other employer expenses for things such as Social Security contributions may also be thought of as an employee benefit. In practice, the relationships between salary and non-salary benefits may differ depending on the type of benefit.

There are advantages to faculty in having some portion of their compensation in the form of benefits as opposed to salary. Colleges may be able to negotiate better rates for things such as health insurance than a faculty member could get on his or her own, thus lowering the total cost of the service. There may be tax advantages to having certain expenses paid through their institution. Colleges also may receive tax benefits from providing certain benefits to their workers. Finally, the college may pay some portion of the total cost of the benefit for the faculty member, which lowers their cost. Colleges can then attempt to tailor the mix of salary/benefits to attract and retain faculty with desirable attributes.

According to the theory of compensating wage differentials (Rosen, 1986), both faculty and colleges view salary and benefits as substitutes for each other. A faculty member receiving few benefits would be willing to give up more salary to increase their benefits than would be true if he or she had a lower salary and higher level of benefits. From the college's perspective, they would also be willing to exchange salary for non-salary benefits. As

a result, colleges that have higher pay, *ceteris paribus*, should have lower benefits and vice-versa.

There have been several studies, such as Mayhall, Katsinas, and Bray (2016) and Smith and Ehrenberg (1983), that examined factors that are related to the average faculty benefits at colleges and universities. These studies varied with regard to the time period examined, the type of institution considered, and the way in which benefits were measured. Woodbury and Hamermesh (1992) focused on the share of compensation in the form of total benefits at two- and four-year institutions. They found that the share of compensation in the form of benefits was lower at institutions that offer graduate degrees, were larger in size, and/or had lower salaries. In another study, Zoghi (2003) used data from the AAUP to examine factors that were related to the average salary of faculty members at public universities. She found that there was a positive association between retirement benefits and salary, but no relationship between salary and the other three categories of benefits.

Data

The data for this study were obtained from two main sources. The first source was the IPEDS surveys conducted annually by the NCES. For most years from 1980 through 2010, IPEDS collected information about institutional expenditures on retirement benefits and

health insurance for faculty. The second source of data was the AAUP. As part of their annual issue of faculty compensation, the AAUP conducts a survey of institutions on faculty compensation. The information on benefits collected by the AAUP varies by year. From 2005 through 2018, the AAUP provided data on both average salaries and average total compensation for faculty. The difference between the two represents the average total benefits from all sources, which includes retirement contributions, medical premiums, dental premiums, tuition benefits for employees and/or their families, contributions to Social Security, disability income protection, unemployment insurance, group life insurance, workers' compensation premiums, and other benefits with cash alternatives.

Selected results

The results show that average total benefits increased from \$25,205 in 2005 to \$29,123 in 2018 after adjusting for inflation (2021 dollars). Similarly, the share of total compensation in the form of benefits has increased during this period, from 21.7% in 2005 to 23.7% by 2018. Table 1 provides a summary of how retirement and health benefits (after adjusting for inflation) increased in selective years from 1980 to 2020. The table shows that while retirement benefits and salaries grew slightly faster than inflation over this 40-year period, there was a dramatic increase in health benefits provided to faculty:

Table 1. Trends in average benefits and salary, selected years 1980 to 2020

Year	Retirement Benefits		Health Benefits		Average Salary
	Dollars	Pct Salary	Dollars	Pct Salary	
1980	\$8,112	9.62	\$2,305	2.75	\$83,125
1990	\$8,959	9.62	\$5,256	5.72	\$91,974
2000	\$8,963	9.28	\$6,399	6.73	\$95,754
2010	\$9,393	9.41	\$10,438	10.8	\$100,129
2020	\$9,632	9.86	\$12,151	12.86	\$98,122
1980 to 2020	18.70%	0.24	427.20%	10.11	18.00%

Figure 1 illustrates how average total benefits in dollars varied across institutions in 2018. Most of the average total benefits were concentrated in the range of \$20,000

to \$30,000; however, the distribution was skewed to the right with a small number of institutions reporting relatively high levels of benefits.

Figure 1. Distribution of average total dollar benefits – 2018

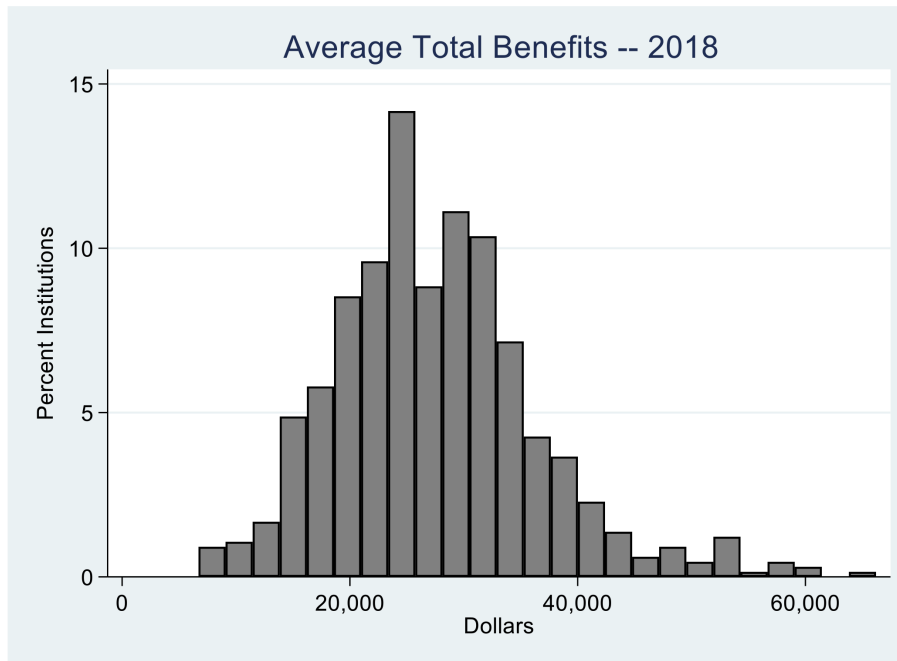


Table 2 summarizes the key findings from the regression analyses looking at how faculty and institutional characteristics were related to average salaries and benefits. The first column uses average total benefits in dollars as the dependent variable. The second and third columns correspond to analyses where average retirement and health benefits were the dependent variables. Finally, the last column shows the results

for the model where average salary was the dependent variable. The abbreviations inside the table indicate whether the variable of interest had a positive connection with salary or benefits, a negative connection with salary or benefits, or no connection. The complete results can be found in the *Research Dialogue* report that accompanies this report.

Table 2. Summary of key regression results for average dollar benefits – 2018

Variable	Dependent Variable:			
	Total Benefits	Retirement Benefits	Health Benefits	Salary
Average Salary	Pos	--	--	--
Percent Male	ns	Pos	ns	Pos
Percent by Rank	ns	Pos	ns	Pos
Private	Neg	Neg	ns	Pos
HBCU/Tribal	Neg	ns	Neg	ns
Revenue per Student	Pos	Pos	ns	Pos
Region	Yes	Yes	Yes	Yes
Size	Mid	Mid	ns	Mid

Notes: Pos = positive association with dependent variable. Neg = negative association with dependent variable. ns = not statistically significant. Yes = factor is statistically significant. -- = not used in the model. Mid = mid-sized institutions had higher benefits or salaries

The first main results is that institutions with higher salaries also tended to have higher benefits. Although this seems to contradict the idea of compensating wage differentials, it actually reflects the fact that retirement benefits and Social Security contributions are based on salary. The rank and gender distribution of faculty was relevant only for salaries and retirement benefits. An important finding in this study is that although salaries are higher at private institutions, they are offset to some degree by lower benefits, particularly for retirement. Faculty benefits were lower at HBCU or tribal colleges, in large part because the health benefits for these institutions were smaller. Mid-sized colleges tended to have higher benefits and salaries. Likewise, institutions with more revenue per student also had higher salaries and retirement benefits. Finally, there were large differences in salaries and benefits due to the geographic region where the institution was located.

Summary and discussion

Faculty benefits are an important, and yet understudied, topic in higher education. Although much is known about how faculty salaries differ by institution, and the various factors that are associated with salaries, little is known about the size and variation of faculty benefits in academe. In this study, I used available data from the AAUP and NCES to help fill this gap.

The longitudinal analysis showed that total faculty benefits have been rising over time, both in absolute terms and as a proportion of total compensation. The growth was driven mainly by rising institutional subsidies for health care costs. As the price of health care has increased, institutions have had little choice but to pick up more of these costs rather than pass all of them along to faculty.

The statistical analysis presented in the paper helps to untangle some of the confusion over benefits versus salary for faculty. Overall, dollar benefits are higher at institutions with higher salaries, in large part due to the way in which benefits for retirement and Social Security are calculated. At the same time, the analyses for shares of compensation showed that institutions on average do trade off salary and non-salary benefits, in particular health benefits.

One of the most interesting results to emerge from the study is the stark difference in benefits between public and private four-year institutions. It has been well documented that faculty salaries are higher on average at private institutions than at public institutions. The large salary gap between the two sectors has raised concerns that public research institutions may not be able to compete with their private counterparts for the best faculty in their respective fields (Alexander, 2001). The results from this study suggest that the total compensation gap between public and private institutions

is not as dramatic in part because public institutions on average offer higher benefits, with most of the difference being due to retirement benefits.

This study provides valuable information on the trends in benefits for faculty, and how they differ across institutions. The information will be useful for policymakers in evaluating how colleges and universities choose to compensate their faculty, and what may happen in the future. Colleges have wrestled with how to address the rising cost of health care coverage for their employees, and whether it is sustainable to continue to expand support for health care costs and maintain salaries that can attract faculty to their institutions. Likewise, as colleges move away from defined benefit plans to defined contribution plans, what will this mean for the types of faculty who they are able to employ? Will institutions be forced to cut back on other less-essential benefits such as tuition remission to meet more pressing financial obligations?

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About the author

Dr. Robert Toutkoushian, Associate Director of the McBee Institute and Professor of Higher Education, holds a Ph.D. in economics from Indiana University and specializes in the application of economic theories and quantitative methods to problems in higher education.

Prior to joining the McBee Institute in 2009, Dr. Toutkoushian held a faculty position in the Department of Educational Leadership and Policy Studies at Indiana University, he worked as a research analyst at the University of Minnesota, and also as executive director of the Office of Policy Analysis at the University System of New Hampshire. From 2011 to 2020, he served as editor of the journal *Research in Higher Education*, which is regarded as one of the leading journals in the field of higher education.

Professor Toutkoushian has published more than sixty studies in peer-reviewed journals and edited books on topics including faculty compensation, student demand for higher education, finance, and policy analysis. Of particular note, along with Mike Paulsen he published the book *Economics of Higher Education: Background, Concepts, and Applications* (Springer, 2016).

Dr. Toutkoushian is currently involved in several studies including an analysis of educator fringe benefits, the distance that students travel to go to college, how the college aspirations of students align with their expectations, the relationship between compositional diversity and institutional retention and graduation rates, and the retrospective views that people have regarding their educational attainment.

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