

Ten-year Analysis of Tuition Costs to an Average In-State Student at University of Tennessee Knoxville

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June 26, 2007

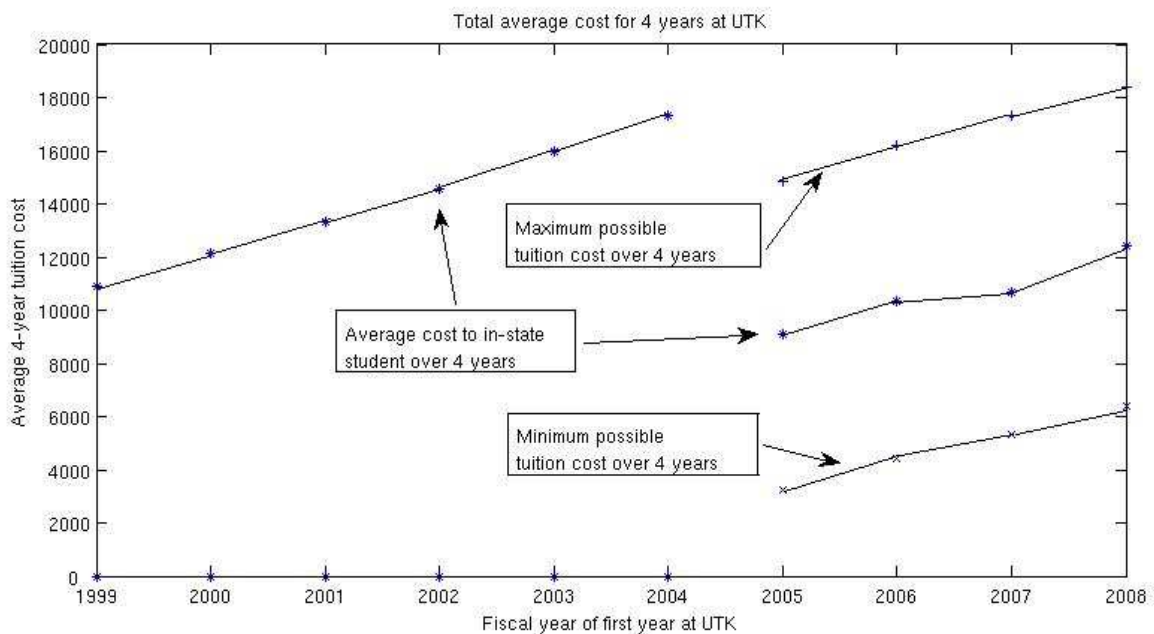
The objective of this brief analysis is to consider the impact of the Tennessee Lottery (HOPE) scholarship on the 4-year costs to students at UTK. The first year that students were eligible to obtain such a scholarship was 2004-2005 (Fiscal Year 2005). Since that time, essentially every entering first year student at UTK had a HOPE scholarship at the time of entrance. Over the few years the program has been in existence, many students have not however maintained a sufficient GPA while at UTK to qualify to keep the scholarship. Here I indicate, under the below assumptions, what the tuition cost (this does not include fees, housing costs, books, or other costs to students in attending UTK) would be for an in-State student.

Assumptions:

1. All students enter with a HOPE scholarship, with 60% retaining the scholarship for their second year, 50% retain it for the third year (e.g. an additional 10% of the class lose the scholarship between their second and third years) and 40% retain it for the fourth year (e.g. an additional 10% of the class lose the scholarship between their third and fourth years). This approximates the limited data available over the history of this scholarship at UTK. However, the academic record of incoming students has been increasing in quality, so the assumptions about fraction retaining scholarships are likely too low.
2. The tuition costs are the historical ones since the 1999 Fiscal year with the assumption of a 6% increase per year for the 2009, 2010 and 2011 Fiscal year. The costs used are for a full-time, In-State student attending for Fall and Spring semesters.
3. All other forms of scholarships are ignored. A significant fraction of the UTK operating budget has been used to supply additional scholarships of various types over the past ten years, in addition to various scholarships from endowment funds. I am unaware of any significant total change in scholarships from these sources over the ten year period of this analysis, so the impact of these excluded scholarships would be to simply lower the average cost per student by a relatively constant amount over the ten year period.
4. The total tuition cost is calculated for an "average" student, in that this is the mean cost per student over 4 years accounting for the fraction of students who lose their HOPE scholarship at various times over the 4 years. No attempt is made to account for students who leave before completing 4 years – this analysis assumes the student remains at UTK for 4 years.
5. The Minimum and Maximum costs for a student were calculated since the start of the HOPE scholarship program by assuming for the Minimum cost that the student retains the HOPE scholarship over the entire 4 years and for the Maximum cost that the student only has the HOPE scholarship for their first year at UTK.
6. The value of the HOPE scholarship increases from \$3800 per year to \$4000 per year effective the 2008 Fiscal year for all students, including those who held the scholarship the previous year.

Results: The results are summarized in the accompanying Table and graph.

Year	Average Cost	Minimum Cost	Maximum Cost
1999	10,914		
2000	12,126		
2001	13,310		
2002	14,854		
2003	15,698		
2004	17,322		
2005	9,074	3,254	14,854
2006	10,315	4,395	16,195
2007	10,697	5,330	17,330
2008	12,398	6,398	18,398



As is evident from the above analysis, the cost to the average in-State student at UTK has decreased substantially since the start of the HOPE scholarship program. The decrease is so substantial that the average cost to a student entering in Fall 2007 is lower than it was for a student entering in Fall 2000. Even if a student entering in Fall 2007 loses the HOPE scholarship at the earliest opportunity, their 4-year tuition cost (\$18,398) is only 6% higher than a student entering in Fall 2003 (\$17,322). Students who maintain their HOPE scholarship throughout 4 years have much lower tuition costs than students entering UTK have had in a well over a decade.

Implications:

The State of Tennessee, through the HOPE scholarship program, has greatly reduced the average cost of attendance at UTK for essentially every entering student. The magnitude of this benefit, though most evident for those students who maintain their HOPE scholarship throughout their undergraduate career, is also very evident for the “average” student who may not retain their scholarship throughout the 4 years. Indeed, students entering UTK this coming year can expect that on average their tuition costs will be lower than those who entered seven years ago! Thus, UTK represents a tremendous educational bargain to in-State students, particularly given the rapid increases in costs at peer institutions over this time period.

Comments about this analysis are welcome – please send them to gross@tiem.utk.edu

Note: Calculations were done using Matlab – the code is available from the author on request.