

MEMO

To: Michael Potepan
From: Jennifer Roffle
Subject: Cost Benefit Analysis of the Worth of a College Degree in California
Date: 12/19/06
Re: Calculation Spreadsheets attached

This cost benefit analysis was conducted to determine if the benefit of attending a four-year CSU public university and obtaining a bachelor's degree is worth the cost in terms of earning potential versus an individual who begins working after graduating from high school. A separate analysis was conducted for both females and males and assumptions were made for benefits as well as cost in this analysis. The results of the CBA showed that attending college for males outweigh the costs and for females it does not.

Assumptions for Benefits

This CBA made several assumptions about benefits based upon earning differentials between a college graduate and high school graduate. It assumed that an individual begins college at 18 and earns \$5,000 annually during the four years they are in college and upon graduating earns the median annual income for college students with a bachelor's degree in California. Likewise, the individual who did not attend college this CBA assumed they entered the workforce at the age of 18 and earned the annual median income for high school graduates in California. All of the earning data for this CBA was obtained from the Census bureau website www.census.gov. Each individual was assumed to retire at sixty five. An ability adjustment was assumed to account for 30% of the earning differentials and a discount rate of 8% interest rate. Inflation was ignored in this CBA.

Assumptions for Cost

This CBA made several assumptions for cost in its analysis. It did not take into account cost of living and instead used tuition as its primary cost to make calculations. Tuition for SFSU is \$3,128 per year for an undergraduate enrolled full-time. This cost was taken from the SFSU website. This amount plus the foregone earnings was used to calculate the cost of attending college. Inflation was ignored in this CBA.

Conclusions

What is the total present value of net earning differential?

Over a lifetime a female who goes to college and earns a BA degree will earn \$65,395.51 more than a woman who does not go to college. Over a lifetime a male who goes to college and earns a BA degree will earn \$84,102.24 more than a male who does not go to college.

	<u>Present Value of Net Earning Differential</u>
Female	\$65,395.51
Male	\$84,103.24

What is the total present value of costs?

The total present value of costs represents the value today for all cost incurred by going to college. Costs include tuitions as well as foregone earnings. Inflation is not taken into account

	<u>Total Present Value of Cost</u>
Female	\$75,971.12
Male	\$82,289.92

What is the benefit/cost ratio?

The benefit/cost ratio was calculated by taking the sum of the present value of net earning differentials and dividing by the total present value of costs. The benefit should outweigh the cost or must be greater than one. In this CBA the males have 1.02 which is greater than one so the benefit outweigh the cost for attending college for males and for females it does not.

	<u>Benefit/Cost Ratio</u>
Female	0.86
Male	1.02

What is the net present value of a college degree?

The net present value of a college degree is the maximum amount one would be willing to pay today in order to receive future higher earnings. The net present value of a college degree was calculated by subtracting the total present value of costs from the present value of net earning differential.

	<u>Net present value of a college degree</u>
Female	-\$10,575.62
Male	\$1,813.32