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SPECIAL COMMUNICATION

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ABSTRACT

Dental student educational debt in the United States continues to grow as a concern for both dental educators and dental students. While certainly warranted, this concern needs to be understood from the perspective of return on investment. The student debt issue remains a critical one. However, this debt is essentially "good" debt when viewed as an investment made by associates/employees of general dental practices and general dental practice owners.

Key words: Associateships, dental education, general dentistry, practice transition, student educational debt

Introduction

Burgeoning dental education-related debt in the U.S. has both dental students and educators worried. This concern is certainly justified. Nevertheless, dental student debt also needs to be viewed as an investment with a currently solid rate of return.

The Mountain

Dental student educational debt continues to grow at alarming rates. About 90% of dental students must finance some or all of their dental education.[1] The combined undergraduate and dental school debt reached an unprecedented average of $221,713 in 2012.[1] All reported dollar amounts herein are United States dollars. Meanwhile, dental expenditures in the United States have been stagnant or flat for a number of years apparently beginning prior to the current economic recession.[2] There is a growing concern about dental student debt in the U.S., so much so that the American Dental Educational Association published in March of 2013 a task force report on the issue.[1]

This essay contextualizes dental student debt from an economic return on investment (ROI) perspective using a simple formula: Reasonably expected future income. All too often investments and other business ventures are analyzed from the cost or expense standpoint, rather than a revenue/return of return angle.[3] Certainly, student educational debt is today a pivotal and critical issue and there is no disputing that fact. However, this debt is a mountain that can be scaled if understood from the standpoint of future earnings for general dentists. "Scaled" is intentionally used here as a double entendre to signify both something that can be climbed/conquered and something that needs to be analyzed or scaled from an economic financial viewpoint. A pioneering research study looking at dental student debt and future income from the perspective of ROI is reportedly forthcoming.[1] Meanwhile let's consider dental education debt as a mountain to be scaled based on ROI.

Educational debt in the United States constitutes an incredibly complex set of variables with a variety of student loans and potential repayment options, including: Standard 10 years level payment at a fixed rate of interest; possible graduated payments for 10 years (which increase

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over time); income-indexed payment for 10 years; and extended payment for 25 years.[4] Consolidation of various loan types may also be possible and grace periods of 6-9 months are often included. Deferment of loan payments may be offered to students in specialty residency programs, but with accumulating interest. Loan repayment options depend on the specific type of loan and have related pluses and minuses, including pre-payment (paying the loan off early) and whether or not others will be responsible for payments in the event of the death of the person with the loan.

Scaling Solutions

The focus here will be on a typical dental student entering general private practice with an educational loan now fixed at a rate of 6.8%. Some undergraduate loans may be at lower rates and some unsubsidized loans may even be at higher rates. Here are the estimated monthly payments for the following loan amounts based on a 10 year amortization with a 6.8% interest rate:

	$50,000	$100,000	$150,000	$200,000	$250,000	$300,000
10 Years	$575	$1,151	$1,725	$2,300	$2,875	$3,450

The monthly payments are indeed frightening, especially at the higher loan amounts. For the sake of analysis, take the average student who graduates with approximately $225,000 in debt for a fixed rate of 6.8%. Such a recent graduate will have a monthly payment of $2,877 or $34,524/year.

The repayment figures per month and year are truly staggering in light of two additional factors. First, there will be little if any federal income tax deduction for the interest on student loans passed the first few years of private practice. A portion of interest on these loan amounts may provide a tax deduction in the 1st year or two for some recent graduates. However, that deduction will soon disappear once taxable income exceeds a certain threshold (currently $75,000 for single tax payers and $155,000 for married tax payers).[5] Second, many new dentists thus will need to make student loan payments with after income tax income (i.e., there will be little or no income tax deduction). Gross income will need to be about 1.25 times (±) the monthly payment amount. For example, to make a monthly payment of $2,877, new dentists in general practice will need to make approximately $3,596 in gross (before tax) monthly income to make the monthly loan payment.

Associateship: Employment scaling solution

According to the American Dental Association, the average income for new dentists with less than 10 years' experience was $117,190 in 2009.[6] Subtract $34,500 in taxable income from $117,000 in order to make the needed annual payments and the new dentist has $82,500 in taxable income to pay for items in a personal budget such as housing, food, clothing, transportation and so forth. While certainly not "rich" and admittedly barely affordable in some high cost of living areas, $82,500/year in 2009 dollars was approximately $13,500 more than the average household income in the U.S., even after subtracting the taxable $34,500 annual educational loan payment.[7]

Perhaps, $82,500/year does not seem an adequate rate of return on an educational investment of $225,000? Newly employed dental associates certainly earn their incomes: Dentistry is intensive, stressful labor. Still, realizing $82,500 on an investment of $225,000, having removed the debt payment from $117,000, is essentially a 33% annual rate of return on educational debt. And the debt will be completely paid off in 10 years. Even for those remaining employed dentists that rate of return is very favorable. This may be one of the reasons that 84% of employed dentists report being either extremely satisfied or very satisfied with their profession.[8] To summarize is a well-earned income of $117,000 a good rate of return on an investment of $225,000? Certainly it is.

Ownership scaling solution

Some employee/associates in general practice will remain in that career track throughout their careers; however, the vast majority of general dentists will become owners or co-owners of dental practices within about 5 years of graduation. For this estimated 80% of dentists, the mountain of student debt is even more scalable. Why? As the saying goes, ownership has its privileges and income is one of the most important.

Consider a student who becomes an owner or co-owner of a general practice 5 years after graduation. If average, the new dentist will still have yearly student loan payments of $31,080 from taxable income. Further, upon becoming an owner, suppose the student borrows $500,000 (gasp!) to become an owner or co-owner of a thriving general practice with solid business systems and favorable financial performance. In today's lending world, with an excellent credit rating, she/he could expect to pay up to 6.0% interest on the $500,000 practice loan over 10 years.

Beware, however, because interest rates are currently rising. A $500,000 loan at 6.0% over 10 years would result in a monthly payment of $5,551 or $66,600 annually.

Such a situation appears too much of a mountain to be climbed, but is it? A general dental practice selling for $500,000 would typically be generating annual net cash revenue of around $700,000 +/–. Practices commonly sell for 60-70% of average annual revenue. Using the70% figure, the practice selling for $500,000 would be generating $715,000 annually in actual collections. Further suppose that this practice has a relatively average business overhead of 65% not counting the practice payment, resulting in $465,000 in overhead and leaving $250,000 in owner profit. Consider the basic annual arithmetic with numbers rounded up/down:
Owner profit: $250,000
Educational loan debt: $34,500
Practice payment: $66,600
Net owner income: $148,900 (before taxes!)

Perhaps this basic example helps explain why 88.5% of dental practice owners are extremely or very satisfied with their professions.[8] All things considered is it a good rate of return to earn $148,900 a year after making student loan payments and practice purchase payment? Most people would answer "yes!" especially with the prospect of erasing student loan debt and practice debt in 10 years. Surely, the owner would likely have additional expenses to invest in the dental practice over 10 years, especially in technology. Nevertheless, the before tax income level is very attractive.

Note that there are extraordinarily complicated tax-related questions which are beyond the scope of this article. For example, practice loan interest would be included as a tax deduction to offset profit for the business, increasing the overhead of the business, but also creating a more favorable tax situation for the owner(s).

Every investment should be considered in view of its opportunity cost. In other words, what return could have been realized had the money been invested in another way? Of course, opportunity cost applies to any career-educational debt and thus dentistry is not unique.

Finally, if dental education debt grows exponentially in the next decade or two without a commensurate increase in dental income for associates/employees or owners, at some time the debt mountain may not be able to be scaled — i.e., it may make little or no economic sense as a career option. This is in part why so much emphasis is being placed on addressing dental student debt now in an effort to make the profession economically sustainable.

Conclusion

If anything, this essay on scaling the dental educational debt mountain has been written on the conservative side, especially in the area on ownership as a solution. In fact, Bender, Weltman, Thomas, Perry & Company, *et al.*, an accounting firm and member of the Academy of Dental Certified Public Accountants, recently released figures for 219 dentists in 187 practices. The average net income per dentist owner was $253,833 in 2012.[9] No doubt, dental student educational debt is a mountain to be scaled. However, with associates earning on average about $117,000 and owners in many cases earning twice that amount, the educational debt is a mountain that can be scaled when viewed from the perspective of "good" debt, which yields a high rate of ROI. Besides rising student educational debt, future government regulations and laws related to dental health care and health-care in general, rising interest rates, economic downturns and lower dental insurance reimbursement schemes and other variables such as increased market share of dental service organizations could all potentially impact the financial viability of the general practice of dentistry.

References

1. A Report of the ADEA Presidential Task Force on the Cost of Higher Education and Student Borrowing. Washington, D.C: American Dental Education Association; 2013.
2. Vujicic M. National dental expenditure flat since 2008 began to slow in 2002. Chicago, IL: American Dental Association, Health Policy Resoures Center; 2013.
3. Webb W, Lange BM. Personal finance, investments and retirement options. In: Dunning DG, Lange BM, editors. Dental Practice Transition: A Practical Guide to Management. Ch. 22. Hoboken, New Jersey: Wiley-Blackwell; 2008. p. 431-45.
4. Repayment primer: Tips to help you prepare repayment on your student loans. Washington, DC: American Dental Education Association; 2013.
5. Available from: http://www.irs.gov/publications/p970/ch04.html. Accessed July 16, 2013.
6. Annual survey of dental practice. Chicago, IL: American Dental Association; 2009.
7. Available from: http://www.davemanuel.com/2009/12/29/average-income-in-the-united-states-will-continue-to-drop-in-2009/. Accessed July 16, 2013.
8. Annual survey. Chicago, IL: American Dental Association; 2008.
9. Dental statistics for the year ended 2012. Kansas City, KS: Bender, Weltman, Thomas, Perry & Company, PC2013.

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