Back to School

Should you get another degree? Here's how to figure out if it will pay off

By Moshe Arye Milevsky

EVERY YEAR, A NEW GENERATION OF MBA students lines up to earn its advanced degrees. Many students temporarily give up lucrative jobs and successful careers to spend 16 to 24 months attending classes and doing homework. I'm sure that each one of them will at some point wonder, "Why did I do this?"

In fact, recent studies by well-known consulting and human resource firms have raised questions about the value of an MBA in today's idiosyncratic economy, compared to a general non-business graduate education.

One way to answer these questions is to figure out whether an MBA — or any graduate degree — provides a decent return on equity. After all, going back to school is an investment in human capital. The cost of the investment is the tuition and expenses, plus any forgone wages, while the dividends and returns will come from future salary increases and bonuses.

So, would going back to school be a good move for you? It's difficult to generalize across different degrees and occupations, but here is one way to do this calculation for yourself.

Start with a salary of $50,000. If you go back to school for two years — which is a reasonable average when summers are taken into account — your approximate forgone wages will be $100,000. Then, add the actual cost of the education — for example, $60,000 for a medium-priced MBA and textbooks — and you arrive at a total investment of $160,000.

HITTING THE BOOKS Your post-school salary doesn't have to jump much to justify education costs

Current salary	Total education costs of $20,000 will require a one-time salary increase of:	$40,000	$60,000	$80,000	$100,000
$25,000	10.2%	13.1%	16.1%	19.0%	21.9%
$50,000	8.8%	10.2%	11.7%	13.1%	14.6%
$75,000	8.3%	9.2%	10.2%	11.2%	12.2%
$100,000	8.0%	8.8%	9.5%	10.2%	10.9%

Note: Figures based on two years of graduate education and a 3% real-wage growth. All salary gains amortized over a 20-year career

Illustration by Chip Wass

Now, it is highly unlikely that your salary will jump by $160,000 — from $50,000 to $210,000 — in your first year back at work to cover all the costs. It will obviously take some time to recoup the expenses. However, if you amortize this cost over the remainder of your working life, the initial increase in salary needed to justify the investment is, surprisingly, not that large. In the table you will see that a one-time 11.7% increase in salary would be enough to pay for the investment over 20 years.

The table can be used for many other ranges of values as well. For example, if you are currently earning $25,000 per year and want to pursue a graduate degree that will cost $100,000 to complete, then your graduating salary must be at least 21.9% more than you would be making if you'd stayed in your old job. If you don't think you will be able to re-enter the labour force and earn at least 21.9% more, it may not be worth the investment. Of course, if your starting salary is only $25,000, it shouldn't be hard to find a job that pays 21.9%, or $5,475, more, especially if you have an extra two years of education under your belt.

As you might expect, the greater the cost of the education, the greater the salary increase must be to make it a worthwhile investment. Also, the greater your current salary, the smaller the percentage increase in salary you'd need, since even a small increase on your (large) salary will pay for the education.

Now, as in any mathematical model, I have made certain implicit assumptions, including a 20-year career after graduation and a 3% real-wage growth. But the reasoning would be the same regardless of the exact parameters. The longer you expect to work, and the greater the growth rate in the new salary path, the smaller the new salary increase has to be to justify the investment. By salary growth rate I mean the rate at which your salary is projected to increase in the future — due to promotions and general wage inflation — compared to what it would be if you stayed at your old job.

And, of course, for those who are pursuing an education for the sake of an education, like many of the liberal arts and more abstract disciplines, the value and return on investment can actually be infinite in satisfaction.

The financial lesson from this is clear (although, as a finance professor, I must admit self-serving): Investing in education pays off over time and on a present-value basis, although not immediately upon graduation. As long as you anticipate a moderate raise in salary from your new degree, over the long term it is probably worthwhile going back to school. B