



QS Return on
Investment Report
*North American
Full-Time MBA 2015*

*Unlocking the value of the
world's top business schools*

 INTELLIGENCEUNIT

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1.0. Introduction

Why an MBA ROI report?

At no point in the long history of the MBA has the value of the degree been simultaneously more questioned, and yet more difficult to ascertain. QS's extensive applicant research has identified a growing desire among prospective MBAs to be able to estimate the return they can expect on their business school investment and to have a clearer view of placement results across schools.

This series of reports are an attempt to help applicants better understand the value of the full-time MBA degree, as well as differences in ROI across countries, individual schools, and between the full-time MBA and other graduate degrees.

This particular report covers North American (limited to the US & Canada) business schools, following on from our report focusing on European business schools published in January 2015. Other regions will follow and the methodology will evolve over time as we collect feedback from schools and MBA students.

What have we found?

Studying a full-time MBA in North America is as wise an investment as it always has been. The return on investment for elite MBA programs in the US & Canada remains strong, tending to outstrip that of their European counterparts over longer periods of time, though higher average tuition fees – especially for elite courses – can be a barrier to entry.

Graduates from business schools across North America are proof of the value of the traditional full-time MBA, amid intense competition from master's programs and a splintering of the MBA market into multiple formats including online, part-time, executive, and accelerated programs. Employment rates and salaries for MBA graduates are much higher than those for graduates of other master's programs, reflecting the value employers place on both the degree and the work experience MBA graduates bring.

How did we find it?

Every year for the last 25 years, we have conducted the QS Global Employer Survey. It is the largest and most comprehensive employer survey of its kind, with over 30,000 respondents to the edition on which our 2015/16 research is based. Among these, nearly 4,000 declared themselves to be MBA employers, providing QS with unparalleled insight into demand for MBAs, and the salaries on offer. This data, along with extensive information collected directly from business schools, provides QS with the unique ability to evaluate current business school placement results and project them forward – the key to an informed estimate of ROI.

In the pages that follow, you'll find a great deal of information on 85 top business schools across North America that responded to our request for information. QS has chosen to publish tables without producing an overall ranking, as the specific rank order varies significantly depending on the unit of measurement. We look at payback period, 10-year return on investment, 20-year return on investment, and salary uplift on graduation. So we have chosen to present all these measures and allow the reader to decide which metric matters most.

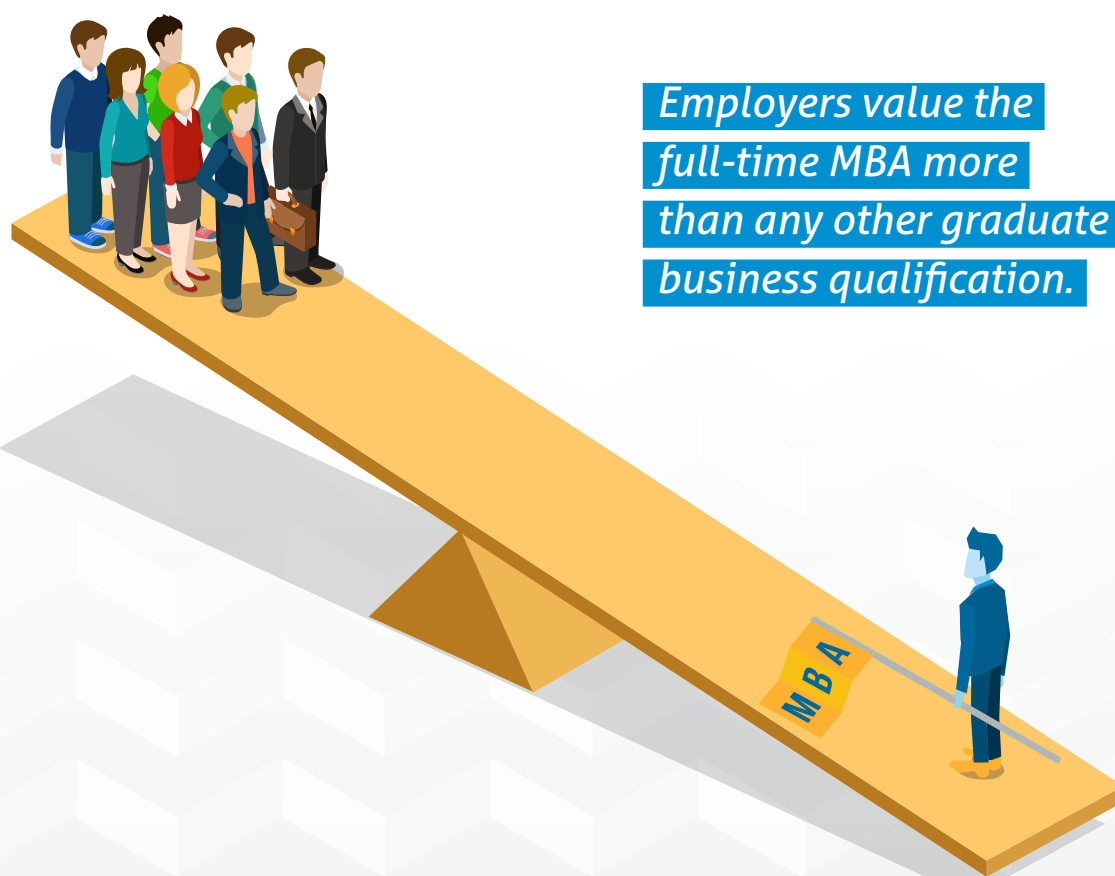
The ROI of an MBA is one the key motivations for taking on the challenge and expense of the degree; it's our aim to shed light on what this highly in-demand yet challenging qualification could do for your career – but it is up to individual readers to determine what sort of return they are looking for.



2.0 Fast Facts

- ⇒ Employers value the full-time MBA more than any other graduate business qualification. For a graduate of a North American MBA program, the average salary is \$91,417. This compares very favorably to the average North American master's graduate, at \$59,769.
- ⇒ Anecdotal evidence, interviews with recruiters, and the QS Global Employer Survey all suggest that 2015 will have been another strong year for growth in MBA recruitment. Lori Cox, director of talent acquisition and management at the international consulting firm Kurt Salmon states that, *"As the result of new business requirements, we have significantly ramped up our MBA recruiting efforts in the past year or two."*
- ⇒ It is unsurprising that the US & Canada's tried and tested two-year course model remains predominant. The average ROI over 10 years on a North American MBA is \$0.50 million. 20 years post-MBA, the average ROI of North American programs is \$2.57 million.
- ⇒ The value of the full-time (FT) MBA in the US & Canada is further emphasized by the fact that on average 85% of FT MBA graduates have a job within three months of graduation, though difficulties with work visa arrangements in the US & Canada mean international MBA students aren't always able to work in the region after completing their studies at a North American business school.
- ⇒ A total of 28 business schools in North America boast 20-year ROIs of \$3 million or more: Stanford, Harvard, Sloan, Wharton, Booth, Columbia, Tuck, Haas, Anderson, Yale, Fuqua, Kellogg, S.C. Johnson, Darden, Stern, Tepper, Goizueta, Mays, Kelley, McDonough, Questrom, Ross, Kenan-Flagler, McCombs, Jones, Scheller, Fisher, and Marshall.
- ⇒ MBA graduates in North America, on average, recoup their business school investment in 44 months. At five schools in the US & Canada, graduates can start earning a return on their investment in less than 30 months: Mays (22), Haskayne (25), Katz (25), Hough (28), and Goizueta (29).

- ⇒ On average, the salary uplift in North America was 75%. The average pre-MBA salary was \$52,723, and this increased to \$91,417 post-MBA. 16 business schools in the US & Canada reported post-MBA salaries that were double their previous level. The single highest uplift in percentage terms was at Schulich (138%), followed by Weatherhead (128%), Katz (127%), Hult (127%), Kelley (125%), Simon (121%), Mays (118%), D'Amore-McKim (113%), Rutgers (111%), Goizueta (110%), Questrom (107%), Fox (103%), Tuck (103%), S.C. Johnson (102%), Tepper (102%) and Haskayne (101%).
- ⇒ Program fees in North America average \$88,045. This reflects the average fees in the United States – \$91,141 – much more than the average fees in Canada of \$64,827.



3.0 Methodology

All methodologies that measure 'return on investment' (ROI) do so by first calculating the investment, then determining the return. If you invest \$100 in a stock on January 1 and the stock is worth \$105 by December 31, after paying a \$3 dividend, the return is easy to calculate: the year-end value of the stock plus dividend, minus the original investment. In this case, the one-year ROI was \$8, or 8%.

Calculating a return on investment for graduate business education is much more complex, requiring a number of assumptions about the future that may or may not turn out to be true. The results are only as good as the assumptions and the data used in the calculations. One method used by many media organizations is to calculate how long it would take a graduate to recoup his or her investment. In such simplified models, which ignore inflation and other variables, if tuition fees for a two-year MBA program are \$100,000, and students have a pre-MBA salary of \$50,000 a year, the total investment is \$200,000. If graduates increase their salary by an average of \$50,000 a year, it will take the typical student four years after graduation to recoup the \$200,000 investment.

QS has sought to produce a more sophisticated and rigorous measure of return on investment. We have also sought to take a longer-term perspective – a typical MBA graduate will work for at least a further 20 years post-MBA and will receive a return in each year of work. So why not calculate the total return on the degree for 10, or even 20 years after graduation? That's what we have set out to do for all 200 schools listed in our Global 200 Business Schools Report. QS acknowledges that the accuracy of the ROI estimate diminishes the longer the time period, but we believe there is valuable insight in providing this 'lifetime' perspective.

Starting with the list of 90 North American schools that feature in the Global 200 report, we eliminated those that declined to participate and those for which we lacked adequate data, narrowing the list to 85 for this North American ROI report.

For each school, we first calculated the business school 'investment' – adding together the total cost of the MBA program with the average forgone pre-MBA salary. For example, for the MBA at Stanford GSB – a two-year

program with a total cost of \$123,750, at which incoming MBAs earn a pre-MBA average salary of \$72,029 a year, the calculation looks like this:

Investment = (pre-MBA pay x program length) + total program cost

Investment = (\$72,029 x 2 years) + \$123,750

Investment = \$267,808

For each school, we then calculated the post-MBA salary increase. Average post-MBA salaries (for class of 2014 graduates employed within three months of graduation) were obtained from the schools themselves. To eliminate outliers that might skew these numbers, we capped the salaries at 120% more than the school's pre-MBA pay. To the capped post-MBA salaries we then added our best estimate of the average annual year-end bonus. To calculate this, we relied on the average post-MBA salary reported by business schools and the average percentage of salary paid out as a year-end bonus to MBA graduates in each region, based on findings from the QS Employer Survey. Signing bonuses were not included in these calculations.

After combining each school's average post-MBA salary and average annual year-end bonus, we subtracted the average pre-MBA salary to determine the post-MBA salary increase. This is the basic building block of the return portion of our return on investment calculation.

Cost assumptions

- ⇒ **Currency:** Throughout this report, all amounts are listed in US dollars to allow ease of comparison across borders and because of the relative strength and stability of this currency as a unit of measure. Most schools provided data in US\$; data reported in Canadian dollars was converted using the exchange rate of C\$0.93 to US\$1.00 (the relevant exchange rate for the cohorts in question).
- ⇒ **Living expenses:** We have not included living expenses, as the student would incur these even if not enrolled in an MBA program, and evidence suggests that MBA students tend to live more frugally than they would if still in employment.
- ⇒ **Tuition and financial aid:** It is assumed that all candidates paid full tuition. QS recognizes that a significant number of MBAs receive partial scholarships or financial aid and such aid will have a significant positive impact on both payback period and ROI.
- ⇒ **Tax:** Tax has not been taken into account in these calculations.

Salary assumptions

- ⇒ **Salary inflation:** For the purposes of the ROI calculation we assumed that the average pay of non-MBAs would increase at a rate of 3% per year, while the minimum expected rate of pay increase of MBAs would be 5% (this minimum post MBA salary inflation is based on the lower range reported by MBA employers responding to the QS Employer Survey).
- ⇒ **Employer demand:** Evidence suggests that a school's reputation with employers positively impacts the earning potential for graduates, so we awarded a bonus of as much as 3% per year for schools that fared well in the QS Global 200 Business School Report (based on the opinions of actively-hiring MBA employers and academics in the field of business & management). Those ranking in the top five globally received the full 3%, while those ranked 6 to 13 received 2.9%, those ranked 14 to 21 received 2.8%, and so on.

⇒ *Entrepreneurship:* Research has shown that MBA graduates who go on to start their own businesses earn less in the early years than those who follow a traditional MBA career path, but are likely to earn more over their lifetime. We awarded an additional bonus of up to 3% per year to salary growth, for the first 10 years, to MBA programs where a large percentage of graduates follow an entrepreneurial path. Schools, reporting that entrepreneurs accounted for 15 to 21% of their graduating class, received the full 3%, while schools with fewer entrepreneurs were awarded smaller bonuses. Schools reporting less than 3% of their graduating class starting their own business received zero bonus.

⇒ *Average period to find a job:* We have assumed the average time it takes for graduates to find a job varies between schools as a function of the percentage employed three months after graduation. The lower the percentage of class employed three months after graduation, the longer it is assumed the average graduate of that school will have to wait to begin to accrue positive earnings.

⇒ *Industry and geography of employment:* QS does have data on the variation in earnings of MBA graduates by industry and by destination of employment. However, for the purpose of simplification, we have not incorporated this data in this report. It is our intention to allow candidates to calculate personal ROIs based on their intended location and industry of work.

Outputs

- ⇒ Monthly returns are then calculated. We use a net present value (NPV) calculation to convert the future income stream to 2015 US dollars using a discount rate of 2%. A net present value represents how much extra an MBA graduate can expect to earn during a given time period, above and beyond what they would likely have earned without an MBA. The following outputs are derived.
- ⇒ **10 Year NPV:** The present value of incremental earnings derived from an MBA 10 years post graduation.
 - ⇒ **20 year NPV:** The present value of incremental earnings derived from an MBA 20 years post graduation.
 - ⇒ **Payback Period:** The average number of months it takes a typical student to recoup their business school investment post graduation.

4.0 Full-Time MBA—The Employer Value

The question of an MBA's 'employer value' is an unusual one. Unlike most other higher education credentials, even other professional degrees, where value is largely determined by the knowledge and skills acquired by the student, the MBA's value is seen by many in terms of employment outcomes. The degree, in short, is worth whatever it will fetch in the labor markets. By that narrow yardstick the MBA has been a runaway success. Since 1990, worldwide demand for MBAs has grown at an average compound rate of 15% annually. In the last 15 years, MBA salaries in the mature North American and Western European markets have grown by nearly 21% to \$94,260, according to the *QS TopMBA.com Jobs & Salary Trends Report*.

While the degree has its share of critics, few can argue that it helps graduates accelerate their careers, shift to new industries, roles, and/or geographic locations, and launch or run businesses. It helps nonprofits take on some of the world's most intractable problems. And it helps businesses grow and adapt.

Since 1990, worldwide demand for MBAs has grown at an average compound rate of 15% annually.



What do employers say?

Lead recruiting manager of Vodafone Americas, Heather Reynolds, appreciates that the MBA is a unique qualification, which in turn leads to a unique entrance to the upper echelons of the corporate world: *"It is important for potential employees to understand that we have a structures plan in place for their career path. We believe in encouraging others to have the power to come up with ideas and this is why we're happy to give all the freedom, choice and opportunity they need to decide where to next take their role and ultimately, their career."*

Miriam Park, director of university programs and MBA recruitment at Amazon has a clear purpose in mind for new MBA hires: *"We are looking for MBAs who want to innovate on behalf of our customers and own projects from start to finish." She also adds that Amazon admires MBAs with "a bias for action and robust analytical thinking".*

Infosys recruits from schools across the globe, and is a perfect example of how taking on more MBA graduates can be a transformational process for businesses. Rajesh Ahuja, global talent acquisition leader for the firm, says *"We constantly need MBAs to come in with strong domain and functional knowledge and help us take the value proposition to our clients."*

"We believe in encouraging MBAs to have the power to come up with ideas and this is why we're happy to give all the freedom, choice and opportunity they need"

– Heather Reynolds, Vodafone Americas

"We are looking for MBAs who want to innovate on behalf of our customers and own projects from start to finish"

– Miriam Park, Amazon.com

"We constantly need MBAs to come in with strong domain and functional knowledge"

– Rajesh Ahuja, Infosys

4.1. Salary Uplift

Salary uplift is a good basic indicator of how employers value the MBA. As with any investment, business school students seek a financial return in the form of higher salaries and bonuses. It is safe to say that virtually every MBA graduate achieves that goal. Across the 85 North American schools in our study, the average salary increase at graduation amounted to \$38,694, an increase of 75%.

Post-MBA pay increases were highest in the US, with an average increase of \$40,761. Canadian MBA graduates received an average increase of \$23,190.

Individual schools with the biggest post-MBA salary increases were:

Top 20	%
Schulich School of Business, York University	138%
Weatherhead School of Management, Case Western Reserve University	128%
Katz Graduate School of Business, University of Pittsburgh	127%
Hult International Business School	127%
Kelley School of Business, Indiana University	125%
Simon Business School, University of Rochester	121%
Mays Business School, Texas A&M University	118%
D'Amore-McKim School of Business, Northeastern University	113%
Rutgers Business School, Rutgers University	111%
Goizueta Business School, Emory University	110%
Questrom School of Business, Boston University	107%
Fox School of Business, Temple University	103%
Tuck School of Business, Dartmouth College	103%
S.C. Johnson Graduate School of Management, Cornell University	102%
Tepper School of Business, Carnegie Mellon University	102%
Haskayne School of Business, University of Calgary	101%
Anderson School of Management, University of California, Los Angeles	97%
Hough Graduate School of Business, University of Florida	97%
Columbia Business School, Columbia University	95%
McDonough School of Business, Georgetown University	94%

Salary uplift

4.2. Percentage Employed on Graduation

A crucial indicator of the value of the MBA is found in employment statistics. The fact that 85% of MBA graduates from the US & Canada are employed three months after graduation is testament to the employability of MBAs. Typically 45% of MBA graduates seek to change career either by function, industry or geography, this making this statistic even more remarkable.

Despite continuing economic instability in some regions, schools are still seeing a strong recruiter presence on campus. Sue Kline of MIT Sloan's career development office says, "*Right now we're not seeing any downturn in interest among companies wanting to recruit on campus. So far the students have fared really well in the market.*"

The MBA is an intensely career-focused degree, so it should come as no surprise that it continues to boast such a high placement rate. Only nine of the 85 schools in our analysis had an average placement rate of 70% or below within three months of graduation, while the regional average was 85%. Schools in the US had a similar placement rate to those in Canada: 86% and 84% respectively.

Top 20	%
Booth School of Business, University of Chicago	97.2
Olin School of Business, Washington University in St. Louis	96.9
Katz Graduate School of Business, University of Pittsburgh	96.2
Mays Business School, Texas A&M University	96.1
Foster School of Business, University of Washington	95.8
Broad College of Business, Michigan State University	95.6
Wharton School, University of Pennsylvania	95.6
Fox School of Business, Temple University	95.2
Simon Business School, University of Rochester	95
Sobey School of Business, Saint Mary's University	95
Goizueta Business School, Emory University	94.8
D'Amore-McKim School of Business, Northeastern University	93.8
Tuck School of Business, Dartmouth College	93.8
Rutgers Business School, Rutgers University	93.5
Darden School of Business, University of Virginia	93.4
Tippie College Of Business, University of Iowa	93
Scheller College of Business, Georgia Institute of Technology	92.9
Fisher College of Business, Ohio State University	92.8
Sloan School of Management, Massachusetts Institute of Technology	92.8
Hough Graduate School of Business, University of Florida	92.6

Employed within three months of graduation

4.3. Fostering Entrepreneurship

It would be wrong to look at the employment value of an MBA without looking at how it fosters entrepreneurship. A desire to engage in entrepreneurial activities is a key motivation for roughly 30% of people taking an MBA. There is significant research to show that graduate entrepreneurs achieve above average earnings over their lifetime. There is also convincing evidence that employers favor candidates with entrepreneurial experience or values. It is beyond the scope of this study to examine this in detail; however, QS has collected information on the percentage of graduates starting their own business at graduation for most of the sample.

Sitting a stone's throw from startup haven Silicon Valley, the Stanford Graduate School of Business reports the highest percentage of MBA graduates starting their own business (16.5%). The average percentage of all North American MBA students starting their own business after graduating is 2.4%. MBAs from the US average at just under this, at 2.0%, while 3.9% of Canadian MBAs go on to start their own business. Of the top-20 North American schools for fostering entrepreneurship, 15 are from the US and 5 are from Canada.

Top 20	%
Stanford Graduate School of Business, Stanford University	16.5
Olin Graduate School of Business, Babson College	15
Kellstadt Graduate School of Business, DePaul University	10.3
HEC Montréal	10
Leeds School of Business, University of Colorado Boulder	10
Harvard Business School, Harvard University	8.1
Sloan School of Management, Massachusetts Institute of Technology	7.4
School of Business, University of Wisconsin-Madison	7
Beedie School of Business, Simon Fraser University	7
School of Business, George Washington University	7
Sauder School of Business, University of British Columbia	5.6
Ivey Business School, University of Western Ontario	5.5
Jones Graduate School of Business, Rice University	5.4
Hult International Business School	5
Alberta School of Business, University of Alberta	5
Rady School of Management, University of California, San Diego	5
Wharton School, University of Pennsylvania	4.7
Yale School of Management, Yale University	4.4
Kogod School of Business, American University	4.2
Smith School of Business, University of Maryland	3.4

Fostering entrepreneurship

5.0. MBA Tuition Costs

For students, the MBA is first and foremost an investment. For most, the only comparable investment they might have made before arriving on campus was the purchase of a house (if they are indeed home owners).

North American business schools typically operate two-year MBA programs. As a result MBAs in this region are generally more expensive than others, with the average program costing \$88,045. Business schools in the US are the world's most expensive, charging an average of \$91,141 for full-time MBA programs, while average MBA tuition costs in Canada are significantly lower at \$64,827.

Below is a list of the schools which charge the lowest fees in our sample.¹

Lowest 20	\$
HEC Montréal	29,574
John Molson School of Business, Concordia University	39,060
Sobey School of Business, Saint Mary's University	39,973
Collins College of Business, University of Tulsa	40,320
Beedie School of Business, Simon Fraser University	46,035
Alberta School of Business, University of Alberta	50,551
Sauder School of Business, University of British Columbia	53,269
Haskayne School of Business, University of Calgary	54,068
LeBow College of Business, Drexel University	56,686
Mays Business School, Texas A&M University	57,316
Zarb School of Business, Hofstra University	58,100
College of Business, University of Illinois at Urbana-Champaign	59,526
School of Business, University of Wisconsin-Madison	60,870
Hough Graduate School of Business, University of Florida	61,071
Terry College of Business, University of Georgia	61,742
Bauer College of Business, University of Houston	63,000
Leeds School of Business, University of Colorado Boulder	66,556
Katz Graduate School of Business, University of Pittsburgh	66,758
Graduate School of Management, Clark University	67,575
Hult International Business School	69,800
Robinson College of Business, Georgia State University	72,000

Program fees

¹ In order to give this report the widest possible relevance, listed fees are those typically charged to international students. Figures are from the 2012/13 or 2013/14 academic year depending on data availability during the collection period/data submitted by schools.

6.0. MBA vs. Master's Degrees – Comparing Salaries & More

The choices that confront a graduate business applicant these days are far more complex, and far more daunting, than they were just a few short years ago. Full-time or part-time; executive, or online? Domestic or international? Which country? Which school? Which specialization? How to pay for it all?

Today, in addition to those concerns, many applicants are not limiting themselves to the MBA, but are considering instead master's degrees of varying degrees of specialization.

These programs, frequently half the length of the traditional two-year MBA, are designed for younger applicants with little or no work experience seeking training in any number of disciplines from finance & accounting, to marketing, to risk management to business analytics, and more.

Such programs are becoming increasingly popular, especially in Europe and North America, where enrollment growth for specialized master's programs is outstripping that of traditional MBA programs. The Association to Advance Collegiate Schools of Business (AACSB) compared a controlled set of accredited schools that answered its surveys in 2008-

09 and 2013-14, and found that worldwide enrollment growth in specialized master's programs was up 42.6%, compared to 0.7% for MBA programs in all formats. Specialized master's enrollment was up 17.8% in Asia compared to 5.3% for MBA enrollment and 43.2% in Europe compared to 18.9% for MBA enrollment. In North America, specialized master's enrollment increased by 49.5% for the five-year period, while MBA enrollment declined by 5.4%.

The *QS TopMBA.com Applicant Survey 2015* showed that 79% of applicants were interested in studying full-time and 32% part-time MBA programs (multiple options were permitted). These are not the only formats available, though: 19% were interested in online learning, and 11% in distance learning, while 17% were interested in executive MBAs. Compared to previous years, this means there's more interest in almost all study modes except the full-time MBA.

The increase in applications to specialized master's degrees reflects a growing demand for graduate-level education in general, as well as an alternative to seeking full-time

employment immediately after graduation. A full-time MBA, which has far more potential for increasing lifetime earnings, requires some years of work experience (typically two or three at least) and so many graduates are faced with a choice – invest in a specialist master's today, or get a job and wait for to take an MBA in a few years. Some may plan to do both a master's (in a non-business & management field) and an MBA.

To simplify this choice, one can say that specialized degrees will prepare graduates for technical roles or specific functions but tend not to develop the same breadth of skills. The MBA prepares graduates for positions in senior management, by cultivating both technical and soft skills, building on the maturity of the candidates.

Since MBAs have far more work experience by the time they graduate, MBA salaries at graduation are considerably higher. According to survey data collected for the

QS TopMBA Jobs & Salary Trends Report 2015/16, MBAs earn a mean annual salary of \$97,300 in the US & Canada. The 2015 GMAC Corporate Recruiters Survey Report reports a median starting salary in the US for MBAs of \$100,000. In this same report, GMAC reported that specialized master's graduates earned a median of \$64,300 in the US, while the QS Global Employer Survey put this figure at \$59,800. While both degrees resulted in a salary increase, choosing a specialized master's degree straight out of college resulted in a smaller increase spread out a longer period of time, while an MBA taken a few years later – years spent in work, importantly – results in a much larger increase over a quicker period.

The following tables show the salary premium that MBA graduates achieve over those with specialized master's degrees.

6.1. Comparing Salaries by Country and Industry

MBA and specialized master's salaries, 2011-2015

	2011	2012	2013	2014	2015
MBA	\$85,300	\$89,400	\$90,000	\$97,700	\$97,300
Master's	\$54,400	\$56,100	\$55,140	\$57,900	\$59,800

Source: QS Global Employer Survey

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Average MBA and specialized master's degrees salaries, 2011-2015

Country	MBA	Master's	MBA Premium (%)
Regional average	\$92,900	\$57,100	63%
Canada	\$87,575	\$55,900	57%
US	\$93,700	\$57,400	63%

Source: QS Global Employer Survey



The table below compares the average salaries reported by employers to QS by industry sector, for MBA-level entry compared to master's-level entry.

MBA and specialized master's degrees salaries by industry, 2011-2015

(Western European & North American average)

Industry Sector	MBA	Master's	Industry Sector	MBA	Master's
 Aerospace & Defense	\$86,601	\$52,368	 Media & Entertainment	\$84,904	\$47,033
 Construction & Property	\$106,164	\$48,871	 Metals / Mining	\$131,945	\$45,573
 Consulting & Professional Services	\$88,541	\$49,095	 Pharmaceuticals & Biotech	\$98,786	\$51,821
 Consumer Goods	\$91,088	\$52,624	 Government & Nonprofit	\$83,445	\$53,403
 Education	\$78,172	\$46,210	 Recruitment / HR	\$88,019	\$40,108
 Electronics / High Technology	\$92,410	\$60,594	 Retail	\$82,373	\$45,292
 Energy	\$105,835	\$52,345	 Telecommunications	\$91,332	\$48,435
 Financial Services / Banking	\$96,007	\$54,873	 Transportation & Distribution	\$83,910	\$45,446
 IT / Computer Services	\$89,052	\$55,323	 Travel & Hospitality	\$79,228	\$33,499
 Law	\$82,500	\$48,811	 Utilities	\$79,359	\$46,992
 Manufacturing & Engineering	\$85,720	\$52,097			

Source: QS Global Employer Survey

6.2. Comparing the MBA & Master's Value Proposition

The opportunities for MBAs at elite employers are still stronger than graduates of specialized master's courses. The 2015 GMAC Corporate Recruiters Survey Report found that 84% of employers were planning to hire MBAs, a growth of 10% from the previous year. Demand for specialized master's graduates had either stayed stable or decreased from last year, with 51% looking for Master in Management graduates, 46% for Master of Finance graduates, and 44% for Master of Accounting graduates.

Why is this the case? Part of it is surely work experience. QS's research shows that recruiters prefer candidates with three to eight years of experience to those with less than three years, 61% to 28%. These figures have held steady for at least four years.

Interestingly, when GMAC tallied the percentage of MBA students with early job offers it found little difference between those returning to their pre-MBA industries and those seeking positions in a new one. While the pay for these inexperienced career switchers may be less, the findings strongly suggest that employers believe MBA programs add significant value and are willing to act on that belief by making offers to graduates who don't have a great deal of experience in their industry.

Amy Wittmayer, career services director at UNC Kenan-Flagler has this advice for prospective MBAs: *"Interview and research people in multiple career paths. Find out what they enjoy most about their jobs. Learn what motivates them. Visit their offices. This homework will pay off once you join a business school."*

One thing that separates full-time MBA programs from specialized master's degrees is participation in the kind of extracurricular bonding experiences that result in deep attachments between students. Students in specialized master's programs are less likely to seek a career change – particularly given that many will not have started a career-proper yet. Those who have are more likely to seek advancement within their existing industry, or even at the same company, a fact that results in a different approach to networking.

Students in specialized master's programs do, in fact, develop networks – in some cases even global networks – but they are narrowly focused on specific industries or functions, such as finance, risk management, or business analytics. *"Students in the full-time MBA program as well as in the MS programs develop networks,"* says Roy Lee, assistant dean of global programs at New York

At General Electric's prestigious Experienced Commercial Leadership Program, a training program for the company's future sales and marketing leaders, about 60% of the 88 graduates hired in 2014 were MBA holders

University's Stern School of Business. *"But the character of the networks is different."*

Another thing that sets MBA programs apart are internships. The internship is an established talent pipeline from schools to companies, particularly important for career switchers or those with little or no experience in their target industry. Of the employers surveyed by GMAC in 2015, 67% had employed MBA interns and 85% of these employers went on to offer one or more of these interns a full-time position. By comparison, 50% of companies in the US had master's level business interns, though a similar proportion of these (83%) offered at least one a full-time job upon graduation. While significantly more employers had non-MBA interns this year than last year (when the figure stood at 29%), MBA students are still at a clear advantage when it comes to finding internships.

Sheryle Dirks, associate dean for career management at Duke University's Fuqua School of Business, says internships help employers determine if the student is a good fit before committing to an offer, adding that interns serve as natural ambassadors for the employer back on campus and can assist in recruiting. *"An MBA intern offers benefits to an employer that pay off in both the short and long term,"* she reflects. *"A talented MBA brings fresh eyes and an extra set of hands to immediate business challenges and can productively move forward projects that might otherwise be left undone. In the process, company leaders see the student in action for several months, which provides a more in-depth 'test drive' than a traditional hiring process."*

Finally, while a specialized degree leads to technical roles that might be off limits to most MBAs, the fact is an MBA specialization can open those doors as well. But the reverse isn't true; an MBA is unrivalled in its ability to provide a general management toolkit.

At General Electric's prestigious Experienced Commercial Leadership Program, a training program for the company's future sales and marketing leaders, about 60% of the 88 graduates hired in 2014 were MBA holders, compared to 40% with technical master's

degrees, according to Heather Giese, who runs the program. Different GE business units do, however, prefer different candidates; the financial services arm, GE Capital, prefers MBAs, while GE Aviation and GE Power & Water prefer those with technical master's.

"ECLP was designed to be our experienced sales and marketing leadership talent pipeline," Giese said. "So bringing external thought leaders and new world skills gained from five to eight years of industry experience and master's programs was a key parameter needed to satisfy our unmet hiring needs internally."

"Interview and research people in multiple career paths" – Amy Wittmayer, UNC Kenan-Flagler Business School

"A talented MBA brings fresh eyes and an extra set of hands to immediate business challenges and can productively move forward projects that might otherwise be left undone." – Sheryle Dirks, Duke University Fuqua School of Business



7.0. Business School Return on Investment in North America

North American business schools still offer a fantastic return on investment, despite higher tuition fees presenting what can be an imposing barrier to entry. In more than half of the schools we analyzed for this report, MBAs could expect to see an average ROI of over \$500,000 within 10 years of graduation. This is due both to the strength of the economy in the US & Canada and the continuing appeal of the two-year MBA curriculum to elite employers worldwide.

In terms of post-MBA salaries, students in both the US and Canada do well. Graduates of US business schools average \$93,967 – a 77% increase on their pre-MBA salaries.

The average graduate of a Canadian school earns \$77,292 after their MBA – a 47% salary uplift. In all, 30 schools in North America report an average post-MBA salary above \$100,000 – and five even make it above \$120,000. These are Stanford GSB (\$129,618), Harvard Business School (\$127,236), the Wharton School (\$123,431), Berkeley Haas (\$121,816) and MIT Sloan (\$121,277). The highest average post-MBA salary at a Canadian school was earned by graduates of the Haskayne School at the University of Calgary, at \$94,264.

7.1. Payback period

MBA graduates from North America can expect to have paid back their MBA investment roughly three and a half years post-graduation. Since graduates of one-year programs forgo only half the salary that graduates of two-year programs do, their business school investment is smaller and their payback period tends to be quicker.

North America's high MBA fees and above-average length mean their average payback period is 44 months. Although two of

Canada's business schools make the top 10 for shortest payback period, its MBAs have a higher average payback period (51) than the USA (43), despite having significantly lower average tuition fees than their southern peers. Five schools in North America have a payback period of less than 30 months.

Top 20	Months
Mays Business School, Texas A&M University	22
Katz Graduate School of Business, University of Pittsburgh	25
Haskayne School of Business, University of Calgary	25
Hough Graduate School of Business, University of Florida	28
Goizueta Business School, Emory University	29
Kelley School of Business, Indiana University	30
Scheller College of Business, Georgia Institute of Technology	30
Hult International Business School	30
Schulich School of Business, York University	31
Simon Business School, University of Rochester	31
Tuck School of Business, Dartmouth College	31
Rutgers Business School, Rutgers University	32
Questrom School of Business, Boston University	33
Fox School of Business, Temple University	33
Fisher College of Business, Ohio State University	33
Darden School of Business, University of Virginia	34
Booth School of Business, University of Chicago	35
Sloan School of Management, Massachusetts Institute of Technology	35
W.P. Carey School of Business, Arizona State University	36
McDonough School of Business, Georgetown University	36

Shortest payback period

MBA graduates from North America can expect to have paid back their MBA investment roughly three and a half years post graduation.



7.2. 10-Year ROI

Over 10 years, the average return on an MBA from a North American business school was \$500,131. US schools had a higher average ROI (\$527,050) than their Canadian counterparts (\$298,236). The highest performing business school in the US was Stanford GSB, which was also the only school in North America to boast a 10-year ROI higher than \$1,000,000.

The Canadian school with the highest 10-year ROI was the University of Calgary's Haskayne School, at \$644,572 – which places 25th in the region. While this means no Canadian schools appeared in the top 20 for 10-year ROI, it is worth noting their lower course fees make it easier to make the investment in the first place.

Top 20	\$
Stanford Graduate School of Business, Stanford University	1,076,395
Harvard Business School, Harvard University	949,907
Sloan School of Management, Massachusetts Institute of Technology	896,280
Mays Business School, Texas A&M University	850,191
Tuck School of Business, Dartmouth College	845,554
Booth School of Business, University of Chicago	834,554
Wharton School, University of Pennsylvania	818,881
Columbia Business School, Columbia University	818,388
Goizueta Business School, Emory University	767,361
Anderson School of Management, University of California, Los Angeles	757,558
Darden School of Business, University of Virginia	756,721
Kelley School of Business, Indiana University	753,576
S.C. Johnson Graduate School of Management, Cornell University	743,422
Tepper School of Business, Carnegie Mellon University	736,900
Haas School of Business, University of California Berkeley	734,148
Fuqua School of Business, Duke University	717,366
Yale School of Management, Yale University	705,051
Questrom School of Business, Boston University	701,862
Scheller College of Business, Georgia Institute of Technology	701,005
McDonough School of Business, Georgetown University	698,023

10-year ROI

7.3. 20-Year ROI

20 years on from graduation, North American MBAs enjoyed an average ROI of \$2.57 million. This average rises to \$2.71 million when looking at the US alone (\$1.50 million for Canada). QS cannot claim precision in producing a figure for 20-year ROI. Any assumptions, however informed, are going to be subject to change over such a long period of analysis.

North America – and the Western world as a whole – has been going through a prolonged period of economic uncertainty. With that said, the economies of the US & Canada have held up reasonably well despite recent troubles in the eurozone and China’s stock market crash. Even with all the difficulties of producing such a long-term analysis, it is useful because it demonstrates, in our opinion, a good estimate of the average real lifetime value of MBAs being produced by these schools. We recommend allowing perhaps a 20% margin of error.

Top 20	\$
Stanford Graduate School of Business, Stanford University	6,055,081
Harvard Business School, Harvard University	5,038,346
Sloan School of Management, Massachusetts Institute of Technology	4,684,105
Wharton School, University of Pennsylvania	4,346,314
Booth School of Business, University of Chicago	4,159,643
Columbia Business School, Columbia University	4,109,711
Tuck School of Business, Dartmouth College	3,989,372
Haas School of Business, University of California Berkeley	3,893,509
Anderson School of Management, University of California, Los Angeles	3,789,947
Yale School of Management, Yale University	3,741,738
Fuqua School of Business, Duke University	3,739,300
Kellogg School of Management, Northwestern University	3,733,604
S.C. Johnson Graduate School of Management, Cornell University	3,608,327
Darden School of Business, University of Virginia	3,606,929
Stern School of Business, New York University	3,564,885
Tepper School of Business, Carnegie Mellon University	3,563,977
Goizueta Business School, Emory University	3,538,782
Mays Business School, Texas A&M University	3,533,716
Kelley School of Business, Indiana University	3,512,177
McDonough School of Business, Georgetown University	3,362,668

20-year ROI

8.0. Conclusion

This report sets out to respond to MBA applicant demand for clarity on the average financial return achieved by taking a full-time MBA at a recognized North American business school.

Employers value the full-time MBA more than any other graduate business qualification. The average salary for a North American MBA graduate is \$97,300 compared to \$59,800 for a master's graduate. The MBA salary uplift in these two countries averaged 75%, and the payback period for the 85 schools in our study was 44 months.

Over the course of a career, this post-MBA salary increase adds up. The average ROI for MBAs in the US & Canada is \$0.50 million over 10 years. At the 20-year mark, the average ROI of MBAs in the US & Canada is \$2.57 million. This ranges between \$0.30 million and \$6.06 million across the 85 of the schools studied in our sample.

This is a very healthy picture, and one that should leave recent MBA students and graduates, as well as prospective students, feeling very optimistic about their future.



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